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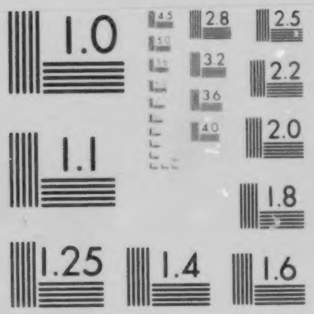

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ABSTRACT

Reported here is the external summative evaluation of the Mountain-Plains program, a residential, family-based education program developed to improve the economic potential and lifestyle of selected student families in a six-state region. (For the internal summative evaluation see CE 014 682-684.) To determine the program's success in rehabilitating its participant families, this evaluation follows a five-domain quality-of-life paradigm which includes the following domains: economic well-being; well-being in the world of work; well-being in the family as a unit; personal psychological well-being of the head-of-household and spouse; and social well-being. Chapter 1 presents the importance of the evaluation and organization of the report. Chapter 2 extensively describes the Mountain-Plains program. Chapter 3 describes the evaluation study, and the findings regarding the effectiveness of Mountain-Plains in accomplishing its goals are presented in Chapter 4. Finally, Chapter 5 presents the conclusions based on these outcome objectives: increase employment earnings; reduce income from welfare sources; increase number of weeks employed; increase occupational prestige; enhance family well-being; and enhance personal well-being. Technical materials are found in the appendix, which comprises a major portion of the document. (BM)

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Report No. AAI-77-35

The Mountain-Plains Education & Economic Development Program: Success or Failure?

January 1978

Richard L. Bale
James A. Molitor

Contract No. NIE-C-1047

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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CHAPTER I

INTRODUCTION

Over the past several years a great deal of public attention has been paid to a specific segment of our population. Several euphemistic phrases were coined to describe this part of the population, such as "disadvantaged" and "culturally deprived." A short catalog of some of the characteristics implied by these terms is more to the point. People or families described as disadvantaged are: economically and materially poor; generally they have poor health, suffer from malnutrition, if not frequent hunger, have poor education, few or no employability skills, and have attitudes toward the world and themselves that certainly will not facilitate them in ameliorating their condition, and they know that there is little or no prospect of things getting better for them or their children. They are barred, for a multiplicity of reasons, from participating in the goodies offered by the main socio-economic system -- in short, they are deprived of the economic and emotional tools necessary for living and experiencing a full life that provides the degree of happiness and satisfaction to which every human being should be entitled. Thus many or most live lives of either quiet desperation or open, destructive hostility and anger.

In addition to the toll paid in terms of human suffering and waste implied above, the existence of such a segment in our population places a serious drain on society, both in economic and moral terms. The presence of such a segment in our society today strongly suggests that it will also be there tomorrow, next year, and ten years from now, for poverty truly is a vicious cycle. Parents who suffer the poverty syndrome almost by definition lack the skills and facilities to enhance their children's opportunities for breaking out of the cycle. Thus, their children will find themselves in basically the same predicament when they grow up, as will their children. Thus the damage to, and waste of, human lives is perpetuated, as is the economic and moral drain on our society. At this point in history the question of how families who are trapped in the poverty cycle got there is basically an irrelevancy -- and it is crucial to note that it is families, more so than individuals, who are caught in the poverty cycle.

The question now of critical importance is: What does it take to help a family break out of the poverty cycle?

There have been numerous attempts, in terms of large and small scale social intervention programs over the past several years, to attack the problem of poverty in our society. Most of these programs seem not to have been fully cognizant that poverty and the poverty cycle are multidimensional in their implications. The services provided by these programs in their attack on poverty have, therefore, been segmented and not comprehensive. The success of such programs has not been overwhelming.

There have been, and are, however, programs predicated on the theory that families caught in the poverty cycle are multi-problem families. Such programs assume that to rehabilitate multi-problem families so they can permanently break out of the poverty cycle requires a comprehensive, multi-faceted treatment in a basically controlled, total environment achieved by administering treatment in a residential setting. Nau* points out that there are four basic program orientations toward family rehabilitation (manpower, employment assistance, rehabilitation, and vocational education), although the real differences among them are rather small. As of early 1973, there were eight comprehensive, total-family residential rehabilitation projects in operation in the United States: Arizona Job Colleges, Inc., a project in Casa Grande, Arizona; the Choanoke Area Development Association in Rich Square, North Carolina; Manpower, Education and Training, Inc. in Cleveland, Texas; four Employment Assistance centers operated by the Bureau of Indian Affairs in Madera and San Diego, California, Roswell, New Mexico and Fort Lincoln, North Dakota; and the Mountain-Plains Education & Economic Development Program, Inc. in Glasgow, Montana. In 1973 Nau stated that, of these projects "...MPEEDP is the most elaborate and sophisticated."

Mountain-Plains, the subject of this evaluation, seemed fully cognizant of the multidemensionality of the problems of families trapped in the poverty cycle and of the comprehensive, multifaceted, family-centered treatment that probably is necessary to enable a family to break the poverty cycle. According to Mountain-Plains' Proposal for Grant Continuance (November 15, 1973), three key concepts operated as policy in the program: 1) residential-family centered -- operationally, entire families were moved into a relatively controlled, total environment (the residential training center is located on Glasgow AFB in Montana); 2) comprehensive treatment -- in cognizance of the multidimensionality of disadvantaged families' problems, a wide range of interdisciplinary theories were drawn upon to guide treatment of the entire family; and 3) the application of an individualized competency based approach to providing treatment, as opposed to the usual standardized regimentation used in dealing with institutionalized clients.

The target population for the Mountain-Plains program was the residents of Idaho, Wyoming, Montana, Nebraska, North Dakota and South Dakota whose "quality of life, employability, and productivity" had been diminished by: "1) The limited socioeconomic opportunities afforded them by the region; and 2) Their familiar patterns of social failure and low employability."

Families within the six-state area were referred to Mountain-Plains from a variety of sources, including the Employment Security Commission, Welfare Department, Bureau of Labor, Bureau of Vocational

---

* Nau, Louis Y., "Family Rehabilitation in Process," Rehabilitation Record, 1973 (September & October): 8-11.

Rehabilitation, Indian Tribal Councils, church groups, a few civic organizations, and from lists of individuals receiving food stamps. Recruiting was done from the six state offices, located in the capital cities of the states served by the program. Entry into, and exit from, the program were open-ended -- a function of the complete individualization of treatment programs and the fact that there were no cohorts as such.

The basic premise underlying the program was that family centered career education provided in a residential setting represents an effective way to improve the "employability, standard of living, participation in the community environment, and life satisfaction of the rural disadvantaged." Program elements were structured around a set of on-Center terminal performance objectives and a set of desired post-exit performance objectives for participants.

Program services to attain these objectives were provided through two operating divisions: Support Services and Education Services. Support Services includes Counselling, Community Recreation, Child Development, and Career Guidance. The Educational Services Division was organized into two departments: Foundation Education and Occupational Preparation.

During the first week on Center at Glasgow participants underwent an orientation phase. The length of time spent in subsequent orientation depended on the individual. During this phase the participants participated in basic programs and had personal needs and goals measured, resulting in an individualized structured plan of activities decided upon by Mountain-Plains staff and the participant. The progress of the individual through his individualized program of treatment was monitored on a monthly basis and readiness to exit the program was determined by achievement of terminal on-Center performance objectives established by Mountain-Plains program staff.

Job placement procedures were initiated three months prior to the participant's projected exit date. The participant indicated his preference for geographic location and the Mountain-Plains staff in that state were notified so efforts to secure job placement for the participant could be initiated. If employment had not been secured for the exiting participant he could engage in "graduate" study at the Center for some period of time while waiting for placement.

Two types of follow-up activities were conducted by the Mountain-Plains staff in the six states: counseling follow-up, as a form of "social maintenance," and data collection for evaluation purposes. In July 1974 the National Institute of Education (NIE) contracted with Abt Associates Inc. to conduct an external, summative evaluation of the success of the Mountain-Plains program in achieving its objectives. The contract was comprised of three distinct but interrelated studies:

(1) A National Needs Assessment, which analyzed the 1970 Census data to describe and estimate the size of the population in the United States, and various regions of the country, who would be eligible for participation in programs similar to Mountain-Plains. If

Mountain-Plains proved to be successful, there were plans to conduct a second aspect of this study to extrapolate the benefits derived by participants in Mountain-Plains to the population eligible for participation in similar programs.*

(2) A Survey of Similar Programs, which consisted of five case studies which compared Mountain-Plains with four other family-centered residential training programs then operating in the United States. One of the original intents for the Survey of Similar Programs was to conduct comparative cost/benefit analysis among the programs. We quickly found that the data necessary for such analysis simply was not available. The comparative case studies do, however, provide a wealth of information about the nature and operations of family-centered, residential training programs.**

(3) A Follow-Up Study of Mountain-Plains participants, including a control group that never entered the program. The Follow-Up Study, which is the subject of this report, (and which was designed by Mountain-Plains and NIE and was in progress when Abt Associates was awarded the evaluation contract) was designed as a summative, report card type of evaluation intended only to provide documentation of the effects of the program on its participants after they left Mountain-Plains. The Follow-Up Study was not designed, nor does this report attempt, to explain our findings in terms of the operating characteristics of Mountain-Plains.

IMPORTANCE OF THE EVALUATION

From its inception through Fiscal Year 1977 a great deal of effort and some $27.8 million had been invested in the residential career education model operated by the Mountain-Plains Education & Economic Development Program, Inc. Through August 1976 the program had served over 1,200 families, including 4,500 individuals. During the calendar year ending in August 1976 Mountain-Plains served approximately 322 families at an average cost of $17,168 per family, or $4,860 per family member. The average cost to produce one adult trainee who had completed all aspects of the program, including job skill training, was $12,054.

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* Bale, Richard L., Donna R. Park and Robert W. McMeekin, Jr., Comprehensive Family-Center Residential Career Education and the Rural Poor: A National Needs Assessment. (Report No. AAI-76-36), February 1975. Abt Associates Inc., Cambridge, Massachusetts.

** Bale, Richard L., and C. Fremont Sprague, Comprehensive Family Centered Training Programs: Five Comparative Case Studies. (Report No. AAI-76-85), May 1977. Abt Associates Inc., Cambridge, Massachusetts.

Mountain-Plains has been touted as state-of-the-art in comprehensive family rehabilitation programs and, indeed, is well grounded in social science theory and application. It has, perhaps more than any other social rehabilitation program yet attempted, the potential to demonstrate that the poverty cycle in all its ramifications can be broken -- to demonstrate what it takes to rehabilitate families educationally, economically, socially and emotionally so they can become happier, more productive members of our society.

The Mountain-Plains program was, therefore, a critical social experiment, and as such demands a critical and rigorous summative evaluation. The evaluation must be eminently objective and fair. At the same time the evaluation must take full cognizance of the methodological pitfalls inherent in such an evaluative undertaking and carefully balance these against the policy implications of making errors regarding conclusions and inferences. How disastrous would it be (in terms of human happiness and well-being, as well as continued societal drain) to erroneously conclude that the Mountain-Plains residential career education program has had insignificant positive impact on the economic and emotional well-being of its clients if in fact it did help them? Or to erroneously conclude that the program, while it has the desired impacts on its clients, is so grossly cost-ineffective that it simply is not viable? The result could be the trash-canning of a major social breakthrough badly needed by our society.

On the other hand, what would be the result of erroneously concluding that the Mountain-Plains program produces the desired positive effects, is very cost-effective and perhaps highly generalizable to other populations, when in fact it is not? Certainly one possible scenario is that the hopes of many people, ranging from policy makers to the clients of the programs, would falsely be raised; additional programs modelled after Mountain-Plains would be funded at great initial expense; and then, predictably, they would begin to fall apart -- all at great cost in terms of invested time, money and emotion. In short, the consequences of making either type of error potentially have far-reaching implications, and we have devoted considerable effort to protecting against both types of errors. Our own position is, however, that the more costly error would be to conclude that the Mountain-Plains program was not effective if, in fact, it really had produced significant benefits for its participants. Therefore we have taken steps to give the program the benefit of the doubt in our analyses of its effectiveness.

As a summative evaluation, this study presents our findings in response to a single, deceptively simple sounding question:

- Was the Mountain-Plains program successful in its goal of rehabilitating its participant families?

In order to be answered, of course, this general question regarding the success of Mountain-Plains had to be made much more specific. To accomplish this we developed a five-domain quality of life paradigm to organize outcome measures around the services provided by Mountain-Plains and the program's goals for its participants. In order to ensure that we, as external summative evaluators, were as a matter of fact addressing the goals the program had set for itself, staff at Mountain-Plains reviewed both the quality of life paradigm and the questionnaire used to measure the outcomes several times during their development. Briefly, the domains of quality of life, and the specific outcomes used to Mountain-Plains success in each, were:

- Economic well-being, as measured by the pre-program to follow-up gain in families' gross monthly earnings from employment.
- Well-being in the world of work, as measured by pre-program to follow-up gains in (1) the number of weeks the head-of-household and spouse were employed; and (2) the prestige of the jobs at which the head-of-household and spouse worked.
- Well-being of the family as a unit, as measured by a summary scale combining the responses of the head-of-household and spouse.
- Personal psychological well-being of the head-of-household and spouse, as measured by a summary scale combining their responses.
- Social well-being, as measured by participation in, and attitudes about, the community.

ORGANIZATION OF THE REPORT

In Chapter Two we provide an extensive description of the Mountain-Plains program -- its structure, the services it provided participants, and the way in which staff and dollar resources were allocated to various program components.

We feel this description is necessary for the reader to gain some appreciation of the breadth and depth of the services Mountian-Plains said it provided to its clients.

In Chapter Three we describe this evaluation study in terms of the research design, the statistical analyses we used and the questions we addressed, and the limitations on the study.

Chapter Four presents our findings regarding the effectiveness of Mountain-Plains in accomplishing its goals.

In Chapter Five we discuss our conclusions about the Mountain-Plains program. Most of the discussion of technical matters has been relegated to the appendices to the report.

CHAPTER II

A DESCRIPTION OF MOUNTAIN-PLAINS

In this chapter we provide an extensive description of Mountain-Plains that covers the clients served by the program, the services it provided to its clients, and the origin and development of the program. The description of the program is detailed because we feel it is necessary in order for the reader to gain a reasonable grasp of how comprehensive Mountain-Plains attempted to be, as well as some of the flavor of the problems it encountered in attempting to implement its operations and reach its goals.

Mountain-Plains was a residential, family-centered, career education/employment training program intended to serve multiproblem families caught in the poverty cycle. The literature on the poverty cycle presents a picture of families trapped by an interacting set of economic, educational, work-skill, social, familial and personal problems that, in combination:

- preclude achievement of success,
- reinforce each other in holding families in poverty,
- are transmitted from generation to generation, and
- refuse to yield to single-factor treatments.

The fundamental hypothesis of Mountain-Plains was that a comprehensive, integrated program of services that simultaneously addresses the combined set of a family's problems and needs could be effective in breaking the poverty cycle and in helping disadvantaged families become, and remain, economically and socially productive members of society.

Mountain-Plains' goals for its participants were thus broad-ranging, and can be stated globally as enhancement of the "quality of life" of program participants. This incorporates the goals of improving quality of participants' lives in the following broad areas:

- economic well-being,
- well-being in the world of work,
- well-bing of the family as a unit,
- personal psychological well-being, and
- social well being (intergration into the community).

Components of the set of services offered by Mountain-Plains addressed one or more of these domains of quality of life.

THE CLIENTS SERVED BY MOUNTAIN-PLAINS

Mountain-Plains served disadvantaged families from the essentially rural areas of Idaho, Montana, Nebraska, North Dakota, South Dakota and Wyoming, a sparsley populated region that encompasses nearly one-fifth of the continental United States. The program's residential training center for participant families was located on Glasgow Air Force Base in Montana, about 40 miles south of the Canadian border (see Figure I-1 on the following page). In addition to the Center, Mountain-Plains maintains field offices in the capital cities of the six states in the region: Boise, Idaho; Helana, Montana; Lincoln, Nebraska; Bismarch, North Dakota; Pierre, South Dakota; and Cheyenne, Wyoming.

Since its first particpants entered the program in February 1972, through August 1976, Mountain-Plains served over 1,200 families, which included some 4,500 individuals. About 80 percent of the participants were White, 14 percent were Native American, 5 percent were Chicano, and 1 percent were Black, proportions that closely reflect the ethnic composition of the region the program serves. One in every five families who entered the program was headed by a single female parent. The typical family had two children and had been living in a rented three or four room dwelling unit that cost $80 a month. Participants were generally young -- about 25 or 26 years old -- and typically had dropped out of school during the 10th grade.

Participants in Mountain-Plains suffered from poor employment conditions prior to entry into the program, although they were generally trying to work. Nearly 93 percent of male family heads were in the labor force, but fewer than half of them were employed when they were screened for entry into the program. Among male family heads who were unemployed at the time they were screened, 84 percent were actively looking for work. The typical male family head had had two or three different jobs during the previous year. Overall, male family heads had earned an average of $3,400 from employment during the year prior to program entry. Among those who had held a job during the year prior to program entry, the average monthly wage while they were working was $435. Among all male-headed (two-adult) families, total family income from all sources averaged $4,300 for the year prior to program entry ($1,200 per family member). Spouses contributed an average of $760 to this total from their employment earnings (about 20 percent of spouses were employed), and an additional $200 came from welfare receipts. Slightly over 40 percent of male-headed families used food stamps, about 23 percent had a savings account, and 43 percent used a family budget.

Among female (single-parent) family heads, 75 percent were in the labor force, but only 41 percent were employed at the time they were screened for admission to Mountain-Plains. On the average, they had held one or two jobs during the previous year but had been unemployed over 28 weeks. Of female family heads who were unemployed at the time they were

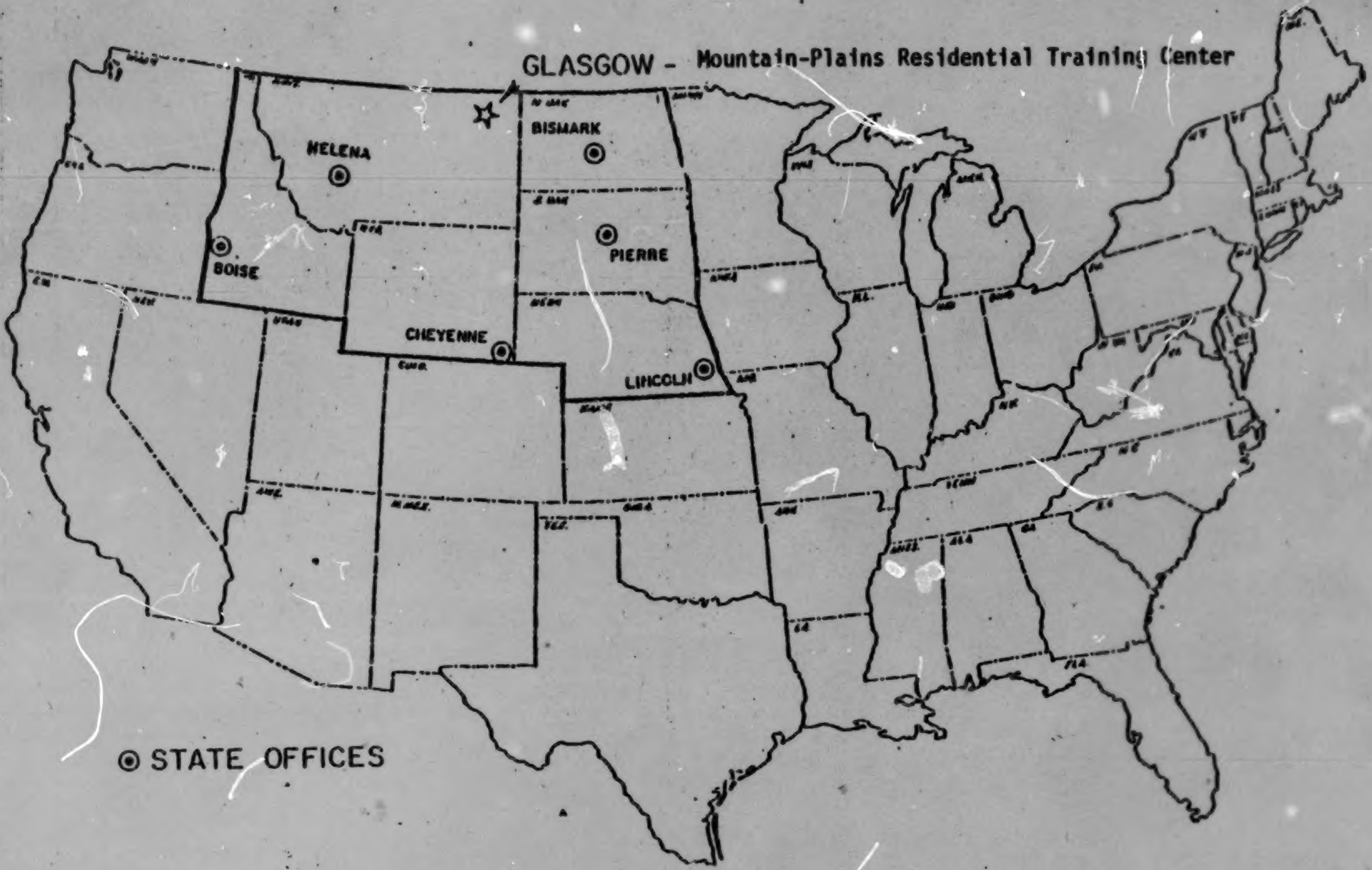

Figure I-1

Mountain-Plains Operating Areas and Locations of Training Center and State Offices screened, 57 percent were trying to find work. On the average, female family heads had earned only $1,600 from employment, received $840 from welfare, and obtained an additional $340 from other sources for an average total family income of $2,800 (about $1,000 per family member) for the year prior to program entry. About 58 percent of female-headed families used food stamps, 19 percent had a savings account, and 52 percent used a family budge.

Although the experiences of different families varied widely, the descriptions presented above provide a reasonable portrait of the families Mountain-Plains had served over the course of its existence.

THE SERVICES PROVIDED BY MOUNTAIN-PLAINS

Mountain-Plains aimed to enhance the quality of life of participant families by providing a comprehensive array of services designed to address the full set of problems that define the poverty cycle. Services were provided to families at the program's residential training center in Glasgow, which had the capacity to serve about 200 families at any given time. Since Mountain-Plains drew its participants from a vast six state region, operations in the states were coordinated with operations at the Center.

In Comprehensive Family-Centered Training Programs: Five Comparative Case Studies (Bale and Sprague, 1977), we developed a paradigm of six major service areas, which include 21 program components, to allow us to compare the range and mix of service that Mountain-Plains and basically similar programs provided to their participants. The following sections discuss each major service area and its components for Mountain-Plains in 1976. Table II-1 on the following page shows how Mountain-Plains distributed its FY76 resources, both money and staff, among the service areas and their components. These figures suggest the scale and relative priority of each service area and component and supplement the verbal descriptions of the program's services.

The descriptions which follow provide an overview of the services and operations of the Mountain-Plains program and were derived primarily from conversations with Mountain-Plains staff and literature published by the program. The descriptions are not based on intensive observations of Mountain-Plains by Abt Associates Inc. staff. Under such circumstances, the picture that emerges probably reflects the ideal that Mountain-Plains staff strove to implement, rather that the operational program as actually implemented. In short, we have no firsthand knowledge of the extent to which the ideals expounded were actually implemented. Mountain-Plains is an extremely ambitious and complex undertaking that required the development, adaptation and integration of a wide-ranging set of personal skills, materials and procedures to function ideally. Such an ideal is seldom achieved, even under the best of circumstances.

Table II-1

Mountain-Plains' Allocation of Net Program Operating Expenditures for the Year September 1975 - August 1976 Across 21 Program Components Within Six Major Service Areas

SERVICE AREAS Components	TOTAL RESOURCE ALLOCATION		STAFF RESOURCE ALLOCATION				NON-STAFF RESOURCE ALLOCATION	
	Total Program Cost/Process	% of Total Program Cost	Number of Staff/Process	% of Total Staff/Process	Total Staff Salaries/Process	% of Total Program Cost/Process	Total Non-Staff Cost/Process	% of Total Program Cost/Process
INTAKE	$ 148,400	2.9%	5.0	2.9%	$ 79,700	1.5%	$ 68,700	1.3%
a) Recruitment b) Screening	$ 148,400	2.9%	5.0	2.9%	$ 79,700	1.5%	$ 68,700	1.3%
STUDENT SUPPORT	$ 1,554,200	30.1%	23.3	13.6%	$ 204,400	4.0%	$ 1,352,500	26.2%
a) Orientation	$ 43,000	0.8%	2.4	1.4%	$ 23,100	0.4%	$ 19,900	0.4%
b) Housing & Maintenance	172,000	3.3%	11.0	6.4%	92,400	1.8%	79,600	1.5%
c) Transportation	27,600	0.5%	2.0	1.2%	14,800	0.3%	12,800	0.2%
d) Medical Care	203,000	3.9%	0.0	0.0%	-0-	0.0%	203,000	3.9%
e) Net Direct Payments to Students	973,300	18.8%	0.0	0.0%	-0-	0.0%	973,300	18.8%
f) Student Organizations	42,200	0.8%	2.4	1.4%	23,100	0.4%	19,900	0.4%
g) Recreational or Avocational Activities	93,100	1.8%	5.5	3.2%	51,000	1.0%	44,000	0.9%
EDUCATION, NOT JOB-SPECIFIC	$ 801,000	15.5%	31.6	18.5%	$ 430,200	8.3%	$ 370,800	7.2%
a) Child Care/Development	$ 362,000	7.0%	13.2	7.7%	$ 194,400	3.8%	$ 167,600	3.2%
b) Basic/Foundation Education	152,100	2.9%	7.1	4.2%	81,700	1.6%	70,400	1.4%
c) Life Skills Training d) Home Skills Training	286,900	5.6%	11.3	6.6%	154,100	3.0%	132,800	2.6%
JOB TRAINING	$ 1,019,600	19.8%	46.1	27.0%	$ 547,600	10.6%	$ 472,000	9.2%
a) Vocational Evaluation	$ 55,500	1.1%	2.4	1.4%	$ 29,800	0.6%	$ 25,700	0.5%
b) Vocational/Occupational Training	688,400	13.3%	30.5	17.8%	369,700	7.2%	318,700	6.2%
c) Counseling (personal, family)	189,900	3.7%	8.3	4.9%	102,000	2.0%	87,900	1.7%
d) Career Guidance	85,800	1.7%	4.9	2.9%	46,100	0.9%	39,700	0.8%
PROGRAM EXIT	$ 445,200	8.6%	15.0	8.8%	$ 239,100	4.6%	$ 206,100	4.0%
a) Job Development	$ 148,400	2.9%	5.0	2.9%	$ 79,700	1.5%	$ 68,700	1.3%
b) Job Placement	148,400	2.9%	5.0	2.9%	79,700	1.5%	68,700	1.3%
c) Follow-Up Counseling	148,400	2.9%	5.0	2.9%	79,700	1.5%	68,700	1.3%
PROGRAM ADMINISTRATION	$ 1,193,400	23.1%	50.0	29.2%	$ 640,900	12.4%	$ 552,500	10.7%
GRAND TOTAL	$ 5,164,600	100.0%	171.0	100.0%	$ 2,141,900	41.4%	$ 3,022,600	58.6%

Note: Slight inconsistencies are due to rounding to the nearest hundred.

INTAKE SERVICES

The intake service area involved two program processes -- recruitment and screening. Intake services did not represent a major proportion of the total program cost (only 2.9 percent). However, no breakdown was available for the allocation of resources devoted to recruitment as opposed to screening.

Recruitment

The recruitment process was carried out by the State Offices division at the state office level. The primary objective of Mountain-Plains' recruitment procedures was to obtain enough acceptable families from the target population to meet state and Center quotas.

State staff members who carried out the recruiting process were required to be well acquainted with the program in order to answer questions about it, especially from prospective students. Although on-Center staff communicated regularly with the state offices, state office staff stayed in touch with program and policy changes primarily through periodic visits to the Center.

State staff conducted a comprehensive interview of each applicant family. As a result of this interview, an information packet was prepared, which included completed forms, a social history and a background check. State staff also attempted to obtain referral agency information, test results, and references.

Approximately three families were interviewed for every one relocated to the Center. Successful recruitment of families appears to have been cyclical. There were times of the year when it was difficult for the states to locate eligible families because of seasonal employment opportunities, weather conditons, and economic factors.

Agency contacts such as county welfare offices, state employment agencies, and vocational rehabilitation counselors were a valuable source of prospective applicants. In some cases, these agencies helped applicants complete needed file items (such as physical examination) after the Mountain-Plains representative had left the community. The Mountain-Plains program continually informed these agencies of the nature of its activities (mostly by correcting the misperception that Mountain-Plains was primarily a vocational technical school). This information effort reduced the number of referrals of obviously unqualified families. Referrals from schools, responses to advertisements, and referrals from Mountain-Plains completers were also valuable sources of applicants.

Screening

The state office staff selected applicants on the basis of criteria that were both comprehensive and complicated. There were three categories of selection criteria: Those tied to internal objectives, those tied to program logistics, and those tied to external objectives. The component criteria within each of these three general areas were as follows:

(1) Criteria tied to internal objectives:

- no families with mentally retarded members were eligible;
- a family was not eligible if any member, adult or child, had a current violent, anti-social or uncontrollable behavior problem;
- illegal use of drugs by any family member excluded the family;
- all persons in an acceptable family had to be rerelated by blood, marriage, or adoption;
- there could not be two or more families in residence at Mountain-Plains with adults who were blood relatives;
- all single heads-of-household must have been legally divorced for at least six months;
- families were excluded if any members had alcohol problems severe enough to interupt work, marriage, or social functiong; and
- adult participants had to have minimum scores of 5.0 on the Wide Range Achievement Test (WRAT) reading test and 4.0 on the WRAT math test.

(2) Criteria tied to program logistics:

- Families with financial obligations that require regular monthly payments (including alimony and child support) were excluded from participation when these payments were considered to be excessive. Furthermore, no family was allowed to defer payments on financial obligations incurred prior to entering Mountain-Plains. However, Mountain-Plains recognized that families who were approved for and received Veteran's Administration (VA) benefits were able to make larger monthly payments. Therefore, limits for monthly payments were higher for these families as are shown below:

Family status with respect to VA benefits	Allowable upper limits for monthly payments
not eligible	$ 70.00
eligible, 1 dependent	120.00

Family status with respect to VA benefits	Allowable upper limits for monthly payments
eligible, 2 dependents	$130.00
eligible, 3 or more dependents	140.00

- families who had pending legal or civil suits were excluded unless acceptance by Mountain-Plains satisfied the legal obligation;
- families whose members suffered from diseases or physical problems that could not be treated at the program's medical facilities were excluded;
- the age range of heads-of-household was 18 to 50 (although Mountain-Plains personnel asserted that they did not formally apply an upper age restriction);
- maximum allowable family sizes were eight for two-parent families and five for one-parent families.

(3) Criteria tied to external objectives:

A family was not eligible for Mountain-Plains if the head of household . . .

- currently possessed saleable job skills;
- desired skills that were not available at Mountain-Plains; or
- had participated in two or more civilian training programs within the last five years.

Mountain-Plains' state offices staff utilized a number of sources in verifying the eligibility of an applicant, including: the personal interview; legal and other records (school, police, court, credit agencies, medical, employers, birth certificates); tests (e.g., the Wide Range Achievement Test); conversations with the applicant's neighbors and relatives; and physical examinations.

STUDENT SUPPORT SERVICES

The student support service area represented a substantial portion of total program cost (30.1 percent), as can be seen from Table II-1. The subsistence stipends paid to students were largely responsible. Also noteworthy was the number of staff employed in the housing process. Each of the seven components of student support services is discussed on the following page.

Orientation

Primary responsibility for orientation of new student families was with a community worker in the community development and recreation program. Orientation was coordinated with a number of other Mountain-Plains processes--administration, counseling, child development, housing, foundation education and occupational preparation. Two non-Mountain-Plains organizations at Glasgow Air Force Base (GAFB), Base Security and the Fire Department, also participated in orientation. The primary goal of orientation was to assist students in making initial adjustments to the program and community.

A community worker was assigned to each family six days prior to the family's arrival at Mountain-Plains. When the family arrived, the community worker met them and accompanied them to their new home, where he showed them around and explained how to use the appliances and utilities. He presented the family with their food allotment check and informed them of the locations and hours of food stores, including the local base store.

The first phase of the orientation process, Orientation I, was conducted each week, Wednesday through Friday. This phase included activities such as a base tour, vehicle registration, familiarization lectures on the various program components, and an official executive welcome. During Orientation I, parents also filled out the necessary forms for placing children in program areas, such as child development or public schools (children above the 6th grade level had to enroll in the Glasgow school system). All insurance and student enrollment record forms also had to be completed and delivered to the appropriate offices before Thursday noon. Most of Friday afternoon was spent in the test center in affective testing. After being tested, the students received their first stipend and became familiar with the pay line.

The second phase of the orientation process began on Monday of the second week of the family's stay at Mountain-Plains. Much of Orientation II was devoted to testing. In particular, the Ohio Vocational Interest Scale was administered as part of Monday's career guidance orientation procedure. Orientation II also included additonal familiarization lectures and the first meetings devoted to the family core curriculum.

Housing

Before they arrived, incoming student families were assigned to housing on the basis of information from relocation forms, the size of the family, and ages of children. After arrival, each family signed a lease for its housing unit and received and signed for two keys. Each family was allowed several days to note housing conditions before the facilities entrance inspection. Several days before they left the program, students were given a list of cleaning requirements in order to prepare for an exit inspection. This was performed to determine damages and housekeeping conditions. If students failed to comply with exit requirements, a cleaning service charge was assessed on a predetermined rate schedule. Damage charges amounted to the estimated cost to repair. Participant families paid rent of $10 per week for their housing, which included furnishings, appliances, utilities, and maintenance.

Transportation

Student families were reimbursed for moving and travel costs for both relocation and dislocation. Families could also drive their private automobiles onto GAFB once these automobiles had been registered with Base Security. Tumpane Corporation, the operations and maintenance contractor at GAFB, operated a bus service around the base. The Glasgow school system operated a school bus for Mountain-Plains' post-sixth grade students -- students below the sixth grade attended school on the base.

Medical Care

Under a contract with Mountain-Plains, Programs Research Institute operated an outpatient clinic at GAFB which served participant families for a minimal charge. The staff of this clinic included two MD's. Persons requiring hospitalization were take to a hospital in Glasgow. All of the Mountain-Plains' participant families were covered by hospitalization insurance.

Subsistence Stipends

Subsistence stipends at Mountain-Plains were $85.00 per week. Thus, monthly gross stipends amounted to about $370, and monthly stipends net of rent were $325. Mountain-Plains students who were eligible for Veterans' Benefits received those benefits over and above their stipends. Student advisors helped students apply for Veterans' Benefits. Mountain-Plains families also were eligible for food stamps. A representative of the Montana State Welfare Department was available on Wednesdays at Mountain-Plains to assist families who wished to apply for food stamps.

Family Organization

Family organization was a formal part of the program under the community development and recreation program at Mountain-Plains. The overall goals of the family organization component were to provide an opportunity for students to participate in community activities and to develop their organizational abilities. Specific training in group leadership, parliamentary procedure, and community action process were given to elected student leaders. The student government at Mountain-Plains was comprised of eleven neighborhood groups, six state representatives and four executive officers. These representatives constituted the MOWINDS* Council. The neighborhood groups were responsible for incorporating incoming students into the organizations, and often inaugurated or shared in action projects. MOWINDS Council, which met weekly, ordered priorities identified by neighborhood groups, represented students to program/community officials, and arranged various community activities. The Council and the neighborhood groups also served as a communication link between students and program/community officials. Additionally, both the groups and the Council functioned as gathering places where community development staff and students could initiate community activities and form interest groups.

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* "MOWINDS" is an acronym representing "MOntana, Wyoming, Idaho, Nebraska, and the DakotaS.

EDUCATION SERVICES, NOT JOB-SPECIFIC

The allocation of resources to the program components in this service area, which encompassed educational activities not related specifically to job training amounted to 15.5 percent of Mountain-Plains' total operating costs.

Child Development

The child development component was operated as part of the Education Services division. At any given time, child care services were provided for approximately 90 children from six weeks to six years old. These services were divided into three programs: infant care, nursery, and kindergarten. Adjustments in enrollment of adult students (attributed to the open entry/open exit program) made placement and termination of their children in the early childhood education program a continuous process.

The infant program provided care for children between the ages of six weeks and two years. Infants were assigned to Licensed Infant Care Homes (LICH's) for the time period infant care was needed -- except that the children of a single head-of-household were cared for throughout the parent's stay at Mountain-Plains. Licensing of the infant care homes was a function of the state social service agency and was in compliance with the Montana state law related to day care. The infant care instructor monitored the performance of the license holders and made weekly and requested visits to the LICH's. LICH operators were requested to attend monthly meetings dealing with such topics as nutrition, childhood diseases, and child growth and development. Specific concerns of the LICH operators were also discussed during these meetings. Essentially, the infant care program was one in which the safety and physiological needs of the child were dealt with before an attempt was made to assist the child in self-development and in attaining social, physical-motor and cognitive skills.

The nursery and kindergarten programs were designed for children between 2½ and 6 years of age. There were six nursery units with a teacher/child ratio of approximately 1/10, excluding aides and other ancillary personnel. The nursery unit's location in a homey building was important in reinforcing the "family" atmosphere of each unit. Activities available to children throughout their day included listening, reading, working, acting, physical movement, science, creating art work, and field trips.

The kindergarten program was similar to the nursery program in terms of both attitude development and research objectives. Attendance at both a public school kindergarten and the Mountain-Plains kindergarten was the usual procedure, with a change between programs at noon being commonplace. Attention was placed on developing the cognitive areas at the kindergarten age level. Parent-teacher conferences were held every three months. These conferences served to inform parents about their child's adjustment to the child development process and also to give instructors an opportunity to advise parents or discuss problems with them. Measurement of the effects of the child development process was accomplished through pre- and post-testing of all children. Tests used included the Purdue Perceptual-Motor Survey, Peabody Picture Vocabulary Test, and the Child Behavior Rating Scale. The Purdue Perceptual-Motor Survey was used to assess qualitatively the perceptual-motor abilities of children in early grades. The Peabody Picture Rating Scale was designed to assess personality adjustment in primary school children. Several sections of these tests were modified by Mountain-Plains to adapt the tests to pre-schoolers.

Foundation Education

Foundation education for adults at Mountain-Plains had two components: communication skills and mathematics skills. The primary objective of the communication skills component was to develop the student's language abilities to the level necessary to support functional job skills. In addition to providing these basic communication skills, the program taught advanced communication skills to students who wish to pass the General Education Development (GED) test, recognized by many employers as equivalent to a high school diploma.

The level at which a student began basic communication skills training was determined by test scores on the Wide Range Achievement Test (WRAT), the Comprehensive Test of Basic Skills (CTBS) and by the communication skills requirements of the student's chosen occupational area. A student whose test scores were below the minimum occupational requirement entered basic communication skills training. Students with satisfactory test scores were validated in basic communication skills and could continue into advanced communications skills if they wished to pass the GED tests.

As with communication skills, the major function of the mathematics skills component was to assess and validate mathematics skills needed by students for their chosen occupations or, if desired, for attainment of the GED. When students were unable to demonstrate the mathematics skills required for a career cluster, they were scheduled into the mathematics skills program to correct this deficiency.

Life and Home Skill Training

At Mountain-Plains, both of these components were part of the family core curriculum. Because of the close organizational association at Mountain-Plains between life skills and home skills, it is appropriate to discuss them together within the context of the family core curriculum. The family core curriculum was an integrated cluster of four individual programs: health education, home management, consumer education, and parent involvement.

The health education program was designed to provide instruction in the concepts and behaviors of proper health care and preventive measures. The curriculum in this area was made up of the following general areas: health information, first aid, major health problems, home care of the ill, family life education, and dental hygiene.

The consumer education program had objectives similar to those of the health education program. Its curriculum included: managing your money, a place to live, car buying, shopping with credit, consumer awareness, and insurance.

The home management program taught that nutrition, grooming, and home management contribute to successful employment and improve quality of life. This program included: understanding nutrition, nutrition and your health, grooming and impressions, clothing and dress, and home care and utilization.

The parent involvement program was designed to teach the concepts and behavior of productive parent-child relations. Its curriculum included: self-image in interactions with children, self-control in interactions with children, growth and development of the infant and toddler, care of the infant and toddler, and developing the baby's potential.

In addition to implementing life and home skills training, the family core curriculum served to introduce the student to education at Mountain-Plains. As mentioned above, students attended their first family core curriculum sessions during orientation. This was their initial exposure to the idea of using individualized learning packages to master a concept. Therefore, the family core curriculum staff had the implicit responsibility for instructing the students in the use of the methods and materials around which the Mountain-Plains curriculum was structured.

In addition to formal classroom instruction, the family core curriculum staff held private sessions with students experiencing problems with particular life skills. The family core and community development programs jointly provided education in home skills for student spouses who had chosen not to enter an occupational area. Finally, family core staff engaged in a variety of support services. For instance, health education instructors reviewed new student medical histories and acted as a liaison to the health clinic; consumer education instructors reviewed new student financial background reports, acted as liaison between students and their creditors, managed legal aid referrals, and provided notary public service; and home management instructors managed a home equipment loan service.

JOB SKILL TRAINING SERVICES

As can be seen from Table II-1, the job training services area represented a significant proportion of program costs (19.8 percent). As befitted its importance, the occupational preparation process absorbed large amounts of both staff and non-staff resources.

Vocational Evaluation

At Mountain-Plains, the vocational evaluation process was a subcomponent of the career guidance process (see below). The awareness and exploration stages of that process were analogous to the vocational evaluation offered in many other residential programs. In the awareness stage, the Ohio Vocational Interest Survey, the Career Abilities Interest and Value Form, and the General Aptitude Test Battery were administered. These tests helped the student become aware of the personal qualities which differentiated him from others and which suited him for particular kinds of work.

Occupational Preparation

The occupational preparation component at Mountain-Plains contained four areas: building trades and services; marketing and tourism; mobility and transportation; and office education.

The building trades and services curriculum was designed to incorporate common tasks and skills in the academic areas of mechanics, electricity, electronics and drafting. Mountain-Plains designed its curriculum to translate these academic disciplines into the following occupational skills: carpentry, drafting, plumbing, heating systems services, cooking systems services, electrical wireman, electric motor repair, electronic assembly, radio and television service, and appliance service. All these careers have commonalities which could be taught in basically the same fashion. For instance, the blueprint reading program was taught in the drafting lab as many careers required skills related to blueprint reading, and it was logical that these common skills were taught in one area. Consequently, within the building trades and services area, the drafting program functioned as a support for the carpentry, plumbing, electrical wire, and heating programs.

The marketing and tourism area had three distinct occupational programs, each of which offered several occupational choices. (1) Food Services which included: kitchen helper; short order cook; restaurant cook; institutional cook; kitchen supervisor trainee; chef trainee; restaurant manager trainee; second baker; and bakery manager trainee. (2) Lodging which included: desk clerk; night auditor; houekeeper; and assistant manager trainee. (3) Marketing and Distribution which included: shipping and receiving clerk; check-cashier; general salesperson; professional salesperson; and mid-management trainee.

The mobility and transportation area was divided into two primary programs: automotive and small engines. The automotive program taught cognitive and performance skills in the following occupational job titles: brake and front end, transmissions (standard and automatic), engine repair and transmissions, engine repair and tune-up, tune-up and auto air conditioning, general mechanic, light duty mechanic, and engine rebuilder. The small engine program taught cognitive and performance skills in small engines, motorcycles, snowmobiles, chainsaws, outboard marine, and related garden and recreational equipment. A short gas and arc welding course was taught in mobility and transportation.

Office education's general objectives were best illustrated through a description of required tasks in the six areas offered at Mountain-Plains. (1) Clerk: Performed routine clerical duties; (2) Clerk-typist: Performed varied clerical duties involving facility and speed in the use of a typewriter and other office machines; (3) Clerk-stenographer: Performed varied and responsible stenographic and clerical duties; (4) Accounting Clerk: Performed routine accounting duties and related tasks using standard office equipment; (5) Bookkeeper: Performed varied and responsible bookkeeping duties and related tasks using standard office machines; and (6) Keypunch operator: Performed routine keypunching duties and related work.

Counseling

Counseling services was staffed by a working supervisor of counseling services, six staff counselors and a clerical/support staff of two. Functionally, the component's responsibility was to bring about an appropriate resolution of the developmental tasks of adult transition in order to assure family, personal, and work functioning.

Each student who entered Mountain-Plains was contacted by an assigned counselor. The amount of time spent in counseling and the particular counseling technique used were the result of a negotiation process between student and counselor. Negotiating permitted the counselor and student to select and apply the best possible counseling program. Once any negotiated treatment cycle was completed, counselor and student had a feedback and review session. Either both agreed that the student's accomplishments were sufficient to ensure his future ability to gain employment and family objectives (in which case the student was scheduled out of counseling), or problems needing further attention were identified and a new treatment cycle was negotiated and scheduled.

Specialized counseling programs were also organized; these included weight control groups, alcohol problems groups, women's groups, men's groups, and minority groups.

Recognition of the need for personal development to complement technical training enabled the counseling process to have direct input concerning completion of the program by any student or family. Unsatisfactory personal development (i.e., negotiated counseling objectives not met) precluded a student's classification as a program completer.

The Mountain-Plains counseling process augmented observation of student behavior with a variety of tests. Tests were administered in the Mountain-Plains test center where the counseling aide received, profiled, and dispersed all test information. Tests administered included the Personal Orientation Inventory, Sixteen Personality Factor-Form C, the

Student Inventory, and the Mooney Problem Checklist. In this fashion, counselors were provided with test results to aid in the identification of students' problems or growth areas.

Before they left Mountain-Plains, students were scheduled into the testing center for exit counseling tests. Students were administered all tests previously taken except the Mooney Problem Checklist. The counseling aide returned test results to the counselors to assist in the preparation of exit reports.

Career Guidance

The career guidance component of Mountain-Plains was subdivided into three segments: awareness, exploration, and world of work. The awareness segment was described earlier as encompassing the vocational evaluation process. During the awareness stage, students were assisted in becoming cognizant of their own capabilities and vocational interests. The awareness stage ended when the students selected occupational areas based on this self-discovery.

In the exploration stage the student analyzed, organized and synthesized information on the general occupational area selected in the awareness stage. For example, students studied employment opportunities, salaries, working conditions and job functions, as well as ascertained the communication and mathematics skills required. The exploration stage also directed the student in planning his own training program. One of the final activities of the exploration stage was a visit to the occupational preparation area where he would receive his training. If the activities observed there matched the student's perceptions of what was necessary to gain competency in that occupation, the exploration stage was completed. If not, the student repeated part of the exploration stage and altered training plans for another try at a satisfactory exit. These decisions were facilitated through group and individual discussions with a career guidance staff person.

The world of work segment of career guidance was designed to assist students in developing those skills and behaviors necessary for obtaining and maintaining employment. In order to assist students in obtaining employment, specific guidance activities focused on resume preparation, preparing a personal records booklet for employment, completing a job application form, and interview techniques. A second world of work objective was to aid students in the development of attitutdes and behaviors which are correlates of successful employment. Specific areas of concern were student performance, conformance, cooperativeness and dependability.

PROGRAM EXIT SERVICES

Program Exit services included three interrelated components: job development, job placement, and follow-on contacts. Table II-1 shows the allocation of resources to this area. No breakout of costs by component was available.

Job Development

The state offices were responsible for conducting job development activities, which had two immediate goals: (1) to develop among potential employers throughout the area a receptive attitude towards Mountain-Plains' students; and (2) to identify available employment opportunities throughout the area that matched the training, career aspirations and desired geographic locations of completing Mountain-Plains students.

Job Placement

Job placement activities were a cooperative effort between the on-Center student placement office and the state offices. The Mountain-Plains job placement process worked as follows. Five weeks prior to program completion, a placement packet was mailed from the Center to a state office. The placement packet acquainted the state staff with the student family and introduced the student to potential employers. It included a financial status report, health report, transcript, instructor's evaluation, and employability report. This placement packet assisted the state office placement staff in describing specific individuals to a potential employer. Two or three weeks prior to exit, the state office staff arranged interview dates for the student. This interview schedule was coordinated with both the placement office and the student on-Center. Immediately following completion of the program, the student traveled, with program assistance, to the interview site. State office staff were on hand to provide assistance and encouragement. Following the interview, the staff member attempted to obtain feedback from the employer that might assist the student in the next interview. An interview evaluation was returned to the Center to assist the career guidance department in improving the interview skills provided students who had not yet completed the program. After placement was achieved, the family returned to the Center and prepared to move to the new job.

Follow-On Services

This component also was the responsibility of the state offices. Follow-on objectives included the following:

- successful settlement of the family in the community;
- continuous employment or active job-seeking by both head-of-household and spouse;
- crisis intervention before a job loss or destabilization of the family;
- continuing good relationship between the employer and the employee;
- career advancement of the head-of-household and working spouse;

- maintaining proper family contact with the state office; and

- making every reasonable effort to locate "lost" families.

Follow-on services also included support in the areas of household budgeting, consumer finance, employer/employee relations, referrals to local mental health programs, medical care, family planning and other community services. In some cases, job replacement was necessary because of a poor job/employee match, over-sold skill levels, incomplete education, or a number of other possible problems.

Follow-on appointments were made by mail, phone or visit as circumstances dictate. Follow-on visits were attempted twice before contact attempts were discontinued. Telephone and mail follow-on contacts were used for out-of-region families. When a family was thought to have moved to another state within the Mountain-Plains region, the receiving state was contacted and the family folder transferred upon request.

ADMINISTRATIVE SERVICES

The Administrative function at Mountain-Plains was carried out primarily by the Executive Office and the Controller. Table II-1 reveals that this service area absorbed 23.1 percent of the program's resources. The executive director was also President of Mountain-Plains Education & Economic Development Program, Inc., and was a nonvoting member of the corporation's Board of Directors. However, the Executive Director never served as either chairman or vice-chairman of the Board. The Executive Office included the Executive Director position, with responsibility for managing the entire Mountain-Plains program, and the Deputy Director position. Immediately under the Deputy Director were four third-level management positions associated with Education Services, State Office Operations, Student Services, and Controller's Services. From an administrative standpoint, the personnel officer and the registrar also must be included in the Executive Office, since these two positions were directly under the Executive Director and Deputy Director, respectively.

While executive authority was retained by the Executive Director, the management council was the chief administrative decision-making body of Mountain-Plains Education & Economic Development Program, Inc. This council was comprised of division-level management personnel, the Controller, the Executive Director, and the Deputy Director. The council met weekly and served, under the chairmanship of the Executive Director, as the body which interpreted and implemented the policies established by the corporation's Board of Directors.

THE ORIGIN AND DEVELOPMENT OF MOUNTAIN-PLAINS

In 1968, the Strategic Air Command Base at Glasgow, Montana was officially closed, leaving a huge complex of housing and other buildings vacant. The availability of these facilities generated a number of suggestions for their effective utilization. The citizens of Glasgow contacted Senator Mansfield of Montana to express their concerns with respect to the local adverse economic effects of closing the base. A 1970 study conducted by Eastern Montana State College concluded that the facilities would be best suited to some type of educational program. These events led to the suggestion that, in view of the nature of the facilites available, the base would serve as an excellent site for a residential family-type education program.

In April 1971 the National Center for Educational Research and Development of the Office of Education (OE), Department of Health, Education and Welfare (DHEW), authorized a grant in the sum of $4,000,000 for the period ending 30 April, 1972 to establish a demonstration program in residential family-centered career education at the Glasgow Air Force Base. Authority for the Grant was the Vocational Education Act of 1963, as amended by PL 90-576 of 16 October, 1968. Subsequent to the initial notification, Mountain-Plains was designated by OE as one of four national career education research and development models. Following the establishment of the National Institute of Education (NIE) in mid-1972, project responsibility for the Mountain-Plains program was assigned to NIE.

Several months following the initial grant notification were devoted to legal processes, initial staffing, facilities identification and other start-up activities. By the latter portion of 1971 initial family programs had been formulated and staffing was accelerated to meet the needs of the first operational phases of the program. Sufficient building space was available to accomodate the staff, although in some instances it was temporary. Sufficient housing for families in limited numbers was also opened at this time.

The first Mountain-Plains staff arrived at Glasgow Air Force Base in July 1971. Temporary offices were operated until a lease agreement for buildings could be negotiated. In September 1971 a team of United States Air Force specialists, DHEW engineers and grants officers, Safeguard officials and Mountain-Plains staff met at Glasgow Air Force Base to negotiate the documents to define the lease arrangements and interagency relationships that would govern the users of Glasgow Air Force Base facilities. The lease agreement was approved by Mountain-Plains and DHEW, and Mountain-Plains had an inventory of buildings whereby plans for utilizing them could then be prepared.

Plans were prepared for instructional and office facilities in consultation with CTA, an architectual consultant firm in Billings, Montana. The plans were presented to the Mountain-Plains Board of Directors in Denver but had to be re-prepared, since at this meeting the OE project officer imposed a rearrangement budget which was less than planned. By October 1972 all educational facilities were adapted and utilized; office facilities were operational, and participant family housing was ready on an anticipatory basis.

In December 1972 the Air Force requested all base facilites users to meet again to renegotiate the tenants' Memorandum of Agreement. In January 1973 Mountain-Plains signed a new lease supplement to the old lease agreement which called for returning some buildings to the Air Force in exchange for others. The exchange, however, allowed Mountain-Plains to sub-lease health care facilities to Programs Research Institute. By 1 January 1973 Mountain-Plains had operations being conducted in eleven buildings utilizing 183,000 square feet. The residential units, primarily for participant family housing, numbered over 200, with over 305,000 square feet of space.

EVOLUTION OF FUNDING

The original commitment to Mountain-Plains from OE was for $20 million to be utilized over a five year period. The first two grants were awarded by OE; subsequent funding was through contracts with NIE after that agency was established, and through the old West Regional Commission (OWRC) starting in October 1975. Table II-2 shows the history of the funding for the Mountain-Plains program.

Table II-2

History of the Funding for the Mountain-Plains Program

Date of Award	Funding Source	Funding in Millions of Dollars
April 1971	Grant from OE	$ 2.2
May 1972	Grant from OE	5.6
August 1973	Contract with NIE	4.5
August 1974	Contract with NIE	5.0
August 1975	Contract with NIE	2.7
October 1975	Grant from OWRC	1.0
January 1976	Grant from OWRC	2.0
October 1976	Contract with Family Training Center	4.8
Total		$27.8

The original research and development plan for Mountain-Plains called for a winding down of the program in Fiscal Year 1976, as indicated by the above spending profile for OE and NIE funds. However, in 1975 the governors of the six states served by Mountain-Plains met and decided to try to keep the program in operation (provided that the states themselves would not have to bear any of the expenses of the program). As a result of this meeting, OWRC, with Idaho in the role of an associate member, requested and was granted $3.4 million from the Department of Commerce's Economic Development Administration, which was earmarked for Mountain-Plains' continued operation through September 1976. The U.S. Senate appropriated $4.8 million for a Department of Labor grant to OWRC to continue Mountain-Plains through Fiscal Year 1977.

BUILD-UP RATES

In February 1972 the first of the initial 12 families arrived at Mountain-Plains' Center on Glasgow AFB, by February 28 all 12 were enrolled. A pilot phase continued until 24 April 1972. Participant build-up continued after this date at approximately five families per week through August 1972.

Starting in October 1972 recruitment was accelerated in order to reduce the amount of time required to bring enrolled participant families up to the maximum envisioned figure of 200. This level was attained at the end of March 1973. Staff build-up was roughly equivalent to that of participant families. By December 1972 Mountain-Plains staff numbered approximately 175, the authorized maximum staffing was 186.

CHANGES IN THE OPERATING ORGANIZATION

The Mountain-Plains Education & Economic Development Program, Inc. (MPEEDP, Inc.), a Montana-chartered corporation, operated the program until the fall of 1976. At that time, as a result of a dispute between the top executives of Mountain-Plains and the OWRC, a new corporation, Family Training Center, Inc. (FTC, Inc.), was formed to operate the program. The dispute which led to this change concerned the terms of the employment contracts between the Mountain-Plains executives and the Board of Directors of MPEEDP, Inc. When negotiations regarding the terms of these contracts became deadlocked OWRC simply established a new corporation, cancelled the contract with MPEEDP, Inc., and awarded a new contract to FTC, Inc. The new corporation also had a new management team, which means that Mountain-Plains began its sixth year of operation with an entirely new executive group, with a new operating philosophy. In September 1976 the top executives of MPEEDP, Inc. were in the process of winding down the affairs of that corporation and were to leave the Mountain-Plains program and Glasgow Air Force Base when this task was completed.

OTHER HISTORICAL DATA

Mountain-Plains' current state of development evolved from a stormy beginning. Eighteen months after initiation of the program, personnel changes occurred in five of the six top management positions. There were serious controversies concerning program design, curriculum design, and whether research and development were to be accepted aspects of the program. At least four major changes occured during the program's design and development stages. First, it was assumed that research, and particularly evaluation, could be accomplished by a single program component -- a Research Services division. That approach was found to be unworkable. As a consequence, evaluation became the responsibility of the entire project and of every component within the project. Leadership and coordination of this effort, and the provision of technical expertise, became the responsibility of the Research Services component. It also was decided that evaluation could not be separated from treatment but instead must be imbedded within treatment. Further, it was decided that evaluation could not be instituted as a "closed system" merely paralleling the remainder of the program.

A second adjustment followed a decision by staff that program design could not be accomplished efficiently one step at a time, as described in the textbooks. For example, instructional objectives could not be finalized prior to deciding upon the instruments necessary for measuring their attainment or the designing of programs. A more efficient approach was to begin these "subsequent" steps at a time when objectives were well stated but not finalized. Through the subsequent process, actual objectives became clearer. The conclusion of Mountain-Plains staff was that several steps in a design process could, and should, be in progress simultaneously.

A third change in program development was the increased acceptance and understanding of Mountain-Plains' research function by the staff in general. As better communication allowed increased staff sophistication and participation in objectives development and evaluation, most of the staff came to accept and even prefer the rational (goal-oriented) approach required.

Finally, program staff discovered that the technical expertise required to complete their design and development effort underwent change in the midst of that effort. Initially, technical expertise in system design was required. Later, expertise in formulating, evaluating, and reformulating objectives became necessary. A need to solidify and polish tests and measurements then emerged. There was need for expertise in interpreting and writing results. It was difficult to find staff who could provide the expertise required for all of these phases. As a consequence, program staff decided it was necessary to add new types of staff expertise as the evaluation effort proceeded.

Additionally, in the opinion of the Mountain-Plains staff, very few usable curricula were found to be available for purchase. Consequently, they undertook the development of their own curriculum. Mountain-Plains designed a pattern for curriculum development which included:

- The identification of detailed and sequenced performance activities required for the achievement of student terminal performance objectives and of job skills;
- The development of a format and system for constructing learning activity packages as vehicles for student attainment of these performance activities, each learning activity package to be self-contained with pretest and post-test, etc., and then to be organized into units and courses;
- The in-service training of 40-50 staff members in this technique;
- The supervision and coordination of that staff as they did task analyses and created content or adapted

selected existing content to this curriculum approach and then constructed comprehensive pretests and posttests (both cognitive and performance) for each area; and

- The creation of forms, procedures, computer programs and a staff of full-time advisors to guide and monitor each student through the total program.

This curriculum development effort encompassed all aspects of the educational component of the program: family core curriculum, foundation education, and job training.

Mountain-Plains' overall curriculum development goal was to create a learner-centered environment which would allow the instructor to serve as one resource within that environment. The student had become largely his or her own curriculum manager, with the instructor daily monitoring and facilitating student progress while a central office, utilizing computer assistance, monitored student progress at a less detailed level and coordinated his or her entire schedule.

Curriculum production difficulties arose in that through outside pressures and early leadership problems extensive program redevelopment became necessary after the program had a full complement of student families to educate and assist. Through the addition of temporary staff and a well-managed effort, the curriculum development was accomplished. Organized by courses and units, the curriculum included some 2,700 learning activity packages.

A variety of other factors contributed to the difficulty of program development, including the geographical isolation of the program, the military red tape consequent to operation on an Air Force facility, fears and misconceptions about the program held by local townspeople, the difficulty of creating an individualized human development program with staff educated to work in traditional programs, and the problem of attempting to develop the program with a full complement of student families on-Center.

In 1976 Mountain-Plains was in a transition phase from its research and development role to an operational role. It was not clear what effects this transition would have on the program. The changeover from one operating corporation to another already has been noted. Also, the name of Research Services has been changed to Technical Support Services. The budget for Fiscal Year 1977 indicated that there was some reduction in force planned, and a few key people in Research/Technical Support Services had resigned. However, it appeared that most of the functions of what used to be called Research Services were deemed so vital to the program's design and operation that they will continue. This division performed all the testing, and extensive testing was built into all parts of the curriculum developed by Mountain-Plains. The new Technical Support Services group probably will continue to develop new tests. The internal evaluation role of Research/Technical Support Services may or may not be maintained. Technical Support Services probably will, as it has in the past, assist the executive director in preparing quarterly management reports and grant proposals and in carrying out special projects.

CHAPTER III

DESCRIPTION OF THE EVALUATION

In this chapter we discuss the nature of the evaluation in terms of the conceptual framework we used to organize the substance of the study and to define the scope of the inquiry, the methodology we employed in conducting the data collection and analyses, and the problems we encountered in the course of the evaluation. This discussion should serve to alert the reader to the strengths and weaknesses of the evaluation, and their potential effects on the validity of our findings and conclusions.

THE CONCEPTUAL FRAMEWORK

In Chapter II we portrayed Mountain-Plains as a comprehensive, residential career education/employment and training program that had the general goal of rehabilitating multi-problem disadvantaged families so they would become economically and socially productive members of society. This goal is no simple undertaking, for such families are characterized by a syndrome of economic, educational, work skill, social, familial and personal problems that not only trap families in poverty but have failed to yield to the single-factor treatments offered by traditional social intervention programs in the fields of education and manpower training.

The external outcome objectives of Mountain-Plains were thus numerous and broad-ranging. In order to organize the many outcome objectives of the program we developed a "quality of life" (QOL) paradigm. First, we stated that the global goal of Mountain-Plains was to enhance the QOL of program participants. This general goal was defined as being comprised of the more specific subgoals of improving the QOL of program participants in five broad domains of life:

- Economic well-being,
- Well-being in the world of work,
- Well-being of the family as a unit,
- Personal psychological well-being, and
- Social well-being (integration into the community).

Each of these five domains was comprised of more specific components.

Many components were further specified by breaking them down into even more specific facets.

In addition to the QOL paradigm we used to organize Mountain-Plains' outcome objectives, we also developed a conceptual framework to guide our assessment of the program's success in achieving these goals. This conceptual framework took into account the interrelationships among four broad sets of factors:

- The external outcome objectives of the program for its participants (the domains and components of the QOL paradigm);
- The conditions and characteristics of participants before they entered the Mountain-Plains program;
- Program participation factors; and
- Exogenous (environmental) factors, which were beyond Mountain-Plains' control but which potentially influenced, and/or were confounded with, the program's effects on the QOL of participants.

Figure III-1 on the following page depicts the hypothesized interrelationships among these four sets of factors. Prior conditions and characteristics of participants as measured prior to entry into the program (T_0) provided not only the criteria by which their eligibility for entry into the program was decided, but as well defined the QOL baseline against which program participants' progress was assessed. In addition, prior conditions were hypothesized to an have an effect upon program participation factors, as represented by line (a). Beyond the impacts prior conditions had on eligibility and program participation factors, the prior experiences participants brought with them into the Mountain-Plains program continued to affect the QOL outcome measures over time, as represented by lines (d), in addition to the effects program participation had on these outcomes.

Program participation factors are shown as having direct impacts on the QOL of program participants at T_1 as indicated by line (b).

At each successive measurement time, we expected status on each of the QOL domains to be affected by status on the QOL outcomes at the previous measurement points, as represented by lines (c).

The last element to be considered in the model is exogenous factors. At each measurement time there was a set of external forces, uncontrollable by either the Mountain-Plains program or its participants, impinging on the QOL of participants, as indicated by lines (e). The nature and intensity of these forces would change quite radically over time, particularly in a period of rapid social and economic change. The effects of exogenous forces on the probabilities of participants' success in the domains of QOL after they left Mountain-Plains were taken into account in the analyses, as was the potential confounding of exogenous factors with program effects.

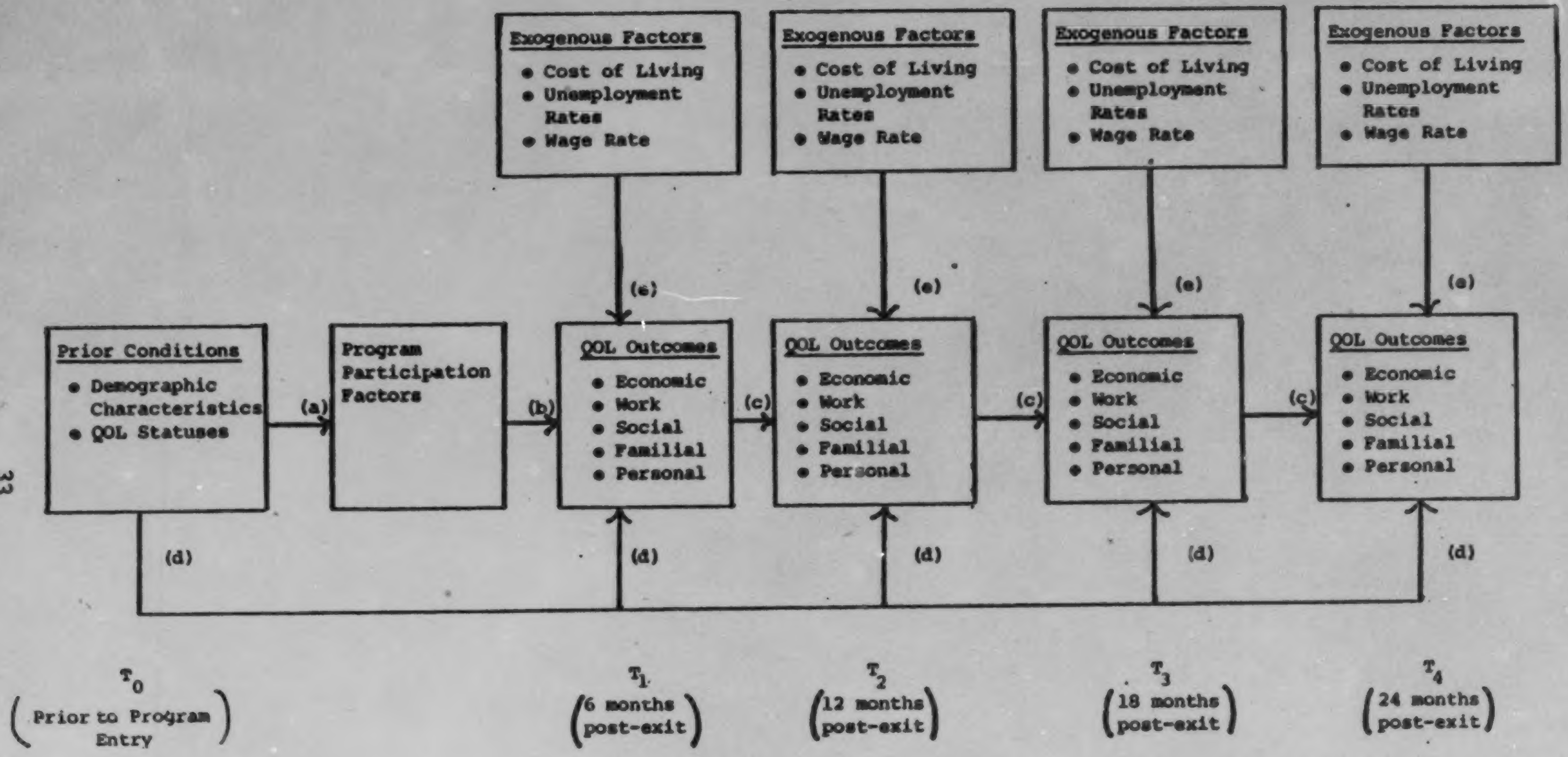

Figure III-1

Conceptual Model of the Interrelationships Among Four Broad Categories of Factors Involved in the Follow-Up Study

The conceptual model of interrelationships among the four sets of factors involved in our assessment of the success of Mountain-Plains in achieving its objectives presents a complex picture. Initial program impacts -- gains in participants' QOL as measured six months out of the program -- had to be able to withstand impingements from exogenous, uncontrollable environmental factors, as well as carry-overs from participants' pre-program experiences, if Mountain-Plains' effects were to survive over time. In addition, we assumed the existence of interactions among the domains of QOL that is not elaborated in the model presented above. An interaction among the domains of QOL is explicit in the conceptualization of the poverty cycle, QOL, and the theoretical foundations of the comprehensive residential approach to career education and family rehabilitation exemplified by Mountain-Plains. Interactions among the domains of QOL may be mutually reinforcing and sustaining in the face of impinging forces, or they may be the cause of participants' deterioration to the original low status in the QOL domains that initially qualified them for entry into the Mountain-Plains program.

With the conceptual model in mind that guided our assessment of Mountain-Plains' success in achieving its goals, let us turn to a description of the scope of our inquiry.

THE SCOPE OF THE EVALUATION

In the preceding discussion of the conceptual framework we referred only to the broad catagories of factors we considered in the evaluation of Mountain-Plains. In this section we outline the full range of the outcome measures we examined during the course of our analyses of Mountain-Plains' effects on the QOL of its participants after they left the program. It is particularly important that the reader is aware of the full breadth of our investigation, since the results presented in this report represent an extreme distillation of the vast number of outcome measures we analyzed in an attempt to identify program effects. We first discuss, by domain, the QOL outcome areas we analyzed, and then turn to the sets of factors that affected Mountain-Plains impacts: prior conditions and characteristics; program participation factors; and exogenous factors.

QUALITY OF LIFE OUTCOMES

As noted earlier, the outcome measures we used to assess Mountain-Plains' success were organized on the basis of a five-domain QOL paradigm. Each domain of QOL was, at a minimum, divided into more specific components which were sometimes directly measurable. Frequently, however, the components making up a QOL domain had to be further divided into constituent facets in order to be specific enough to measure. Table III-1 on the following page presents a summary list of the five QOL domains and their respective components. The facets for components are discussed in the text on the following pages, as they are encountered.

Table III-1

Components of the Five Domains of Quality of Life

I. ECONOMIC DOMAIN
    a) Family Income
    b) Family Financial Management

II. WORK (OCCUPATIONAL) DOMAIN
    a) Gross Employment Earnings
    b) Career Progression
    c) Unemployment
    d) Underemployment
    e) Job-Holding Ability
    f) Job Satisfaction
    g) Job-Finding Behaviors
    h) Occupational Prestige

III. FAMILY DOMAIN
    a) Warmth and Happiness
    b) Strength
    c) Sociability
    d) Respect for Individuality
    e) Child-Centered vs. Parent-Centered

IV. PERSONAL DOMAIN
    a) Self Regard
    b) Self Acceptance
    c) Self Confidence
    d) Sense of Personal Efficacy

V. SOCIAL DOMAIN (INTEGRATION INTO COMMUNITY)
    a) Satisfaction with Services
    b) Social Awareness
    c) Recreation
    d) Participation in Organizations
    e) Education

Economic Domain

The economic domain of QOL was conceptualized as consisting of two primary components that defined areas of intended Mountain-Plains program impact: (a)adequacy of family income; and (b) financial management. In assessing impact in the economic domain of QOL, the family was used as the unit of analysis (as opposed to individual persons). The content of the two components was as follows.

Adequacy of Family Income

"Family income" refers to the gross income received by a family, regardless of the sources of the income, and provides a global indicator of the economic well-being of the family. To assess program impacts on family income we first examined families' total income from all sources, for the family as a unit, and on a per-family-member basis.

We then examined family income in terms of the sources from which it was obtained: employment earnings, welfare receipts, unemployment benefits, transfer payments, and "other" sources of income.

Financial Management

The second component of economic well-being refers to the way in which a family managed its financial resources. By managing financial resources we mean the way a family handled credit and debt, financial planning/budgeting, and the allocation of financial resources across numerous expenditure categories. Several indicators were used to assess program impacts on the ways in which a family managed its financial resources: how deeply in debt a family was, whether a family was current or behind in meeting its financial obligations, whether or not a family had a credit line, whether or not a family had borrowed money from a bank as opposed to a finance company, and whether or not a family had a savings account.

Work Domain

The work domain of QOL refers to the well-being of the individual person, the head-of-household and spouse, in the world of work. As the Mountain-Plains program was a career education program, and economic well-being is in a large degree dependent upon success in employment, the work domain received a great deal of attention in our analyses as it did on the program. The impacts of the Mountain-Plains program on well-being in the world of work was examined separately for the head of the household (HOH) and the spouse, in terms of the following eight components.

Gross Employment Income

This component refers to the total number of dollars the HOH and the spouse each earned from employment. This is an important indicator of success in the world of work.

Career Progressions

Well-being in this component of the work domain of QOL refers to the advances a person made in her or his work life. Whether such advances were made within a single occupation area or by changing occupations, career progression refers to advances in several areas -- advances in wage rate, in supervisory responsibilities, in increased autonomy on the job, and increases in the complexity of the work tasks for which the person was responsible.

Unemployment

This was defined as the number of weeks a person was unemployed in a six month period of time. It is distinguished from underemployment and job-holding ability, which are discussed below. Measurement of unemployment, however, may reflect either the person's willingness to work or the degree to which employment is consistently available (regardless of willingness to work).

Underemployment

This component refers to the average number of hours worked per week as a percent of a 40-hour week, during periods of employment.

Job-Holding Ability

Job-holding ability measured the degree to which an individual, once employed, avoided either dismissal by his employer or withdrawal at his own discretion. Frequent changes in employment that did not lead to increases in income, level of responsibility or job satisfaction were indicators of poor job-holding ability. (Job changes that resulted from externally caused lay-offs rather than firing did not reflect poor job-holding ability.)

Job Satisfaction

Job satisfaction references the extent to which a person was satisfied with and derived satisfaction from his employment in terms of the work tasks he did, his co-workers, pay, supervision, opportunity for promotions, and the personal treatment he received from his employer and co-workers.

Job-Finding Behaviors

Critical to well-being in the world of work is knowledge of how to go about locating and obtaining employment, plus the motivation to actually search out available job openings. In this component of the work domain of QOL, therefore, we examined the steps people followed in attempting to obtain employment, the persistence of their search, and, where appropriate, their perceptions of why they had not been able to obtain employment or why they had stopped looking for work.

Occupational Prestige

This component refers to the status of the occupation in which a worked, relative to other occupations.

Family Domain

The well-being of the family as a unit was another important domain of QOL highly related to Mountain-Plains outcome objectives. The program was family-oriented and emphasized the importance of family well-being -- at a minimum, as a necessary support to enhance well-being in other domains of QOL, and as an intrinsically worthwhile goal. We assessed family well-being by having the man and the woman of the house individually describe their own family in terms of the following five components:

Warmth and Happiness

This component refers to the extent to which family members felt love and warmth for each other, enjoyed being together, and the degree to which members perceived themselves as being a happy, satisfied family. A family rated high on this component should provide strong, warm, emotional support for its members.

Strength

Family Strength refers to how well a family held together and worked together when it was confronted with a problem. When faced with trouble, the members of a strong family would provide support for each other, whereas in a weak family the members would tend to withdraw from each other in troubled times.

Sociability

Families, just as individuals, may be characterized in terms of the degree to which they are introverted/extroverted. The Sociability component of family well-being, therefore, refers to the extent to which family members had friends outside the family and the degree to which such friends were accepted by the rest of the family.

Respect for Individuality

Respect for Individuality refers to the degree to which family members were encouraged and aided in developing their unique, individual potentials and accepted as individuals, as opposed to stifling individual identity and growth.

Child-Centered Versus Parent-Centered

While it is perhaps difficult to attach a positive or negative valence to this component, we characterized families in terms of whether parents expected children to be strictly obedient, to "be seen but not hearch" (parent-centered), or whether children were treated less strictly and given more freedom and had their growth as individuals encouraged (child-centered). We treated the child-centered end of the continum as indicative of positive family well-being in our analyses of program impacts, since this was Mountain-Plains' emphasis.

Personal Domain

The Personal Domain of QOL refers to the personality characteristics/emotional well-being of the individual person (man of the house and woman of the house) along four components hypothesized to be particularly relevant to success in the world of work.

Self Regard

Self Regard refers to the ability to like oneself because of one's strength as a person. Self Regard indicates affirmation of self because of worth or strength.*

Self Acceptance

Self Acceptance refers to the ability to accept, or affirm, oneself in spite of one's weaknesses or deficiencies.*

Self Confidence

Self Confidence refers to a mature, unanxious confidence in one's self and one's capacity to effectively deal with things -- a sense of sureness of one's worth.**

Sense of Personal Efficacy

Sense of Personal Efficacy refers to the extent to which a person feels he has control over the things that happen to him, that he can influence his own well-being through personal decisions and actions.

Social Domain

We defined well-being in the social domain of QOL as the degree to which a family and its members were "integrated" into the community in which they lived. Integration into the community was conceptualized as consisting of four components that allowed an assessment of the behavioral and psychological integration of the family and/or individual family members into the community. These components were:

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* Self Regard and Self Acceptance were measured by the Sr and Sa scales from the Personal Orientation Inventory (POI).

** Self Confidence was measured by the O scale from the Sixteen Personality Factors (16PF) test battery.

Fairness of, and Satisfaction with, Community Services

This component dealt with the extent to which the family members felt they were treated fairly when they interacted with community, governmental, health and recreation sectors and the degree of satisfaction they felt with the services and treatment provided by them.

Social Awareness

This component indicated the extent to which family members attempted to keep abreast of local and national events through regular use of the mass media, as opposed to existing in a social vacuum.

Use, Satisfaction, and Importance of Recreation Facilities

Here the concern was with the importance to the respondents of public recreation facilities such as parks, campsites, swimming pools, etc., and the frequency of use and satisfaction with these facilities.

Participation in Community Organizations

This component referred to the personal involvement of family members in governmental affairs and civic organizations by assessing active participation in political meetings, youth groups, fraternal orders, etc.

Importance, Fairness, and Satisfaction with Education Services

This component was assessed only for that subset of families with children in local elementary or secondary schools, and was measured by the reported importance of children's education, satisfaction with the education children were getting, fairness of treatment children received in school, and parental participation in their children's schools.

FACTORS AFFECTING MOUNTAIN-PLAINS' IMPACTS ON PARTICIPANTS

In addition to the QOL outcome measures described above that we used in our assessment of Mountain-Plains' effectiveness, the conceptual framework for the study recognized three categories of variables that potentially affected, or were confounded with program effects:

- Prior conditions and characteristics of participants,
- Program participation factors, and
- Exogenous factors.

Prior Conditions and Characteristics of Participants

Each person and family brought to the program a unique personal history and set of characteristics that affected not only their participation in Mountain-Plains but also affected, and/or was confounded with, the impact on them of participating in the program. In order to derive estimates of Mountain-Plains' effects on the outcome measures, uncontaminated by the effects of variables other than the program itself, it was necessary to statistically control for, or remove, the effects of the prior conditions and characteristics participants brought with them to the program. The prior conditions and characteristics that we used for this purpose were for the HOH and the spouse: their age, ethnicity, years of education, number of weeks unemployed during the year prior to entry into the program, the number of jobs held during the year prior to entry into the program, the gross earnings from employment during the year prior to entry into the program, whether or not they were employed when they entered the program, the occupational prestige of their current or most recent job at the time they entered the program, plus the number of people in the family. In additon, because their life circumstances are so different, we found it necessary to treat one-parent and two-adult families separately.

Program Participation Factors

There were five factors related to the nature of families' participation in the Mountain-Plains program that we included, or attempted to include, in our analyses of Mountain-Plains' effects on participants: participant completion status, length of time in the program, area of job training, how well a participant did in each program component, the stage of development Mountain-Plains itself was in while a participant was in the program, and the internal functioning of the Mountain-Plains program.

Participant Completion Status

Having entered the Mountain-Plains program, a participant either completed and was validated in all required program components and graduated (a completer), or the participant left the program before being graduated (a non-completer). It seemed reasonable to assume that completers should receive greater benefits from the program than would non-completers. This, of course, made completers a group of particular interest since, if the program were to have positive effects on anyone, those participants who experienced the full treatment should show them most strongly. It was not clear, however, whether we should expect non-completers to receive at least some discernible benefits from their participation, or whether the trauma of another failure (not having finished the program) would cause a loss from where they were at entry on various QOL measures. This made non-completers a group of special interest in themselves. On the other hand, we also argued that the merits a program such as Mountain-Plains should be judged on the basis of the effects it had, averaged across all participants. After all, participants could drop out of the program because of problems within the program, as well as because of personal problems and shortcomings. Therefore there were three groups of interest based on program completion status to be analyzed: the aggregate group of participants; completers; and non-completers.

Length of Time in the Program

In addition to whether or not a participant completed his or her program at Mountain-Plains, the length of time spent in the program could have affected the degree of benefits a family received from going through the program. Length of time in the program, however, could work either way. From one perspective, it would be assumed that the longer a family's exposure to the services provided by the program, the stronger would be the effects of the program on the family. On the other hand, since the Mountain-Plains curriculum was tailored to meet the unique needs of each person and family, it could have been that longer stays in the program were indicative of problem participants and that longer stays in the program were needed to achieve adequate results with such families.

Area of Job Training

One program participation factor that could have had an effect on how well participants did economically and in the world of work after they left Mountain-Plains was the type of occupation for which they received job training. Some jobs simply pay more than others, and there might have been a greater demand for some types of job skills than for others. For a number of reasons, however, we did not analyze the effects of area of job training on the outcome measures. These reasons will be discussed later.

Stage of Program Development

The fourth program participation factor that could have affected the apparent success of Mountain-Plains was the stage of development of the program as various participants went through it. Ideally, the Mountain-Plains program (which was an ambitious and complex organizational and educational undertaking) was to have evolved through a series of evolutionary stages, from an initial feasibility/experimental state to a mature, smooth-running organization in a stable mode of operation. We conducted some analyses to look for differential program effects associated with hypothetical stages of Mountain-Plains' development, and could find none.

Even without the empirical verification, we could find no evidence that Mountain-Plains ever stabilized as an organization. Perhaps it became fairly stable in terms of the development of its curriculum. However, this is not clear. What does seem clear to us (although staff at NIE disagree with us), is that a continuing series of funding crises, political problems and major staff turnovers precluded Mountain-Plains from maturing as an organization during the first four to five years of its existence. The "Origin and Development of Mountain-Plains" in Chapter II describes some of these problems. As a result, we dropped from our final analyses a consideration of the effects of stage of program development.

Internal Functioning of Mountain-Plains

Knowledge and analysis of the internal functioning of Mountain-Plains, as well as of how well individual participants did when they were in the program, obviously are critical to our being able to explain why Mountain-Plains succeeded or failed, and to being able to make the kinds of pragmatic suggestions for improvement that are so important to program managers. Unfortunately, we have no firsthand knowledge of either the internal functioning of Mountain-Plains as an organization or how well participants did in the various components of the program.

A study of the internal workings of the program was not part of the original scope of work for the contract. Abt Associates requested that the scope be increased to encompass such a study but NIE did not have the resources available to support the undertaking. This is probably just as well, because Mountain-Plains refused for two years even to cooperate in the Survey of Similar Programs described in Chapter I. Cooperation in the intensive study that would have been required to detail the actual internal processes of the program was even less likely to have been forthcoming.

Regarding knowledge of how well participants did in the various program components, Mountain-Plains simply did not have usable information available. The necessary information did not exist at all for many participants and was spotty for most others. It was not until well past the mid-point of the data collection activities for this study that a viable management information system that included this type of data began to take shape.

Given the absence of knowledge of the internal functioning of the Mountain-Plains program and how well participants did in the various program components, we were forced to view the Mountain-Plains treatment essentially as a "black box" in our analyses.

Exogenous Factors

A variety of factors external to the Mountain-Plains program also could have impinged upon the success of the program in its effort to enhance the QOL of its participants. Exogenous factors are forces beyond the control of either the program or its participants and primarily included economic factors such as changes in the cost of living, and unemployment and wage rates. These factors potentially influenced money income, real income, the probability of finding employment and, through the interactive effects among the QOL domains, QOL in general. Exogenous factors thus were potentially both confounded with effects of the Mountain-Plains program and had a direct impact on the magnitude of the program's effects. Assessment of program effects therefore took into account changes in exogenous factors to avoid possible distortions in findings.

Personal Maturation

In addition to the factors identified above, there may have been a personal maturation effect in operation on Mountain-Plains participants, particularly in the economic and work domains. The participants from whom our data were gathered tended to be relatively young; the mean ages for males and females were about 25 and 23 years, respectively. Consequently, we were dealing with people just beginning their working lives and who were relatively "green" at getting along in the world of work. For several years to come, they would be going through a personal maturation process in their working lives that could result in settling down, becoming better workers, learning how to deal with employers, and gaining seniority on the job -- all of which would tend to increase employment earnings, number of weeks employed, occupational status, etc., independently of any effects due to Mountain-Plains. Our examination of program impacts had to take this into account.

This concludes the overview of the numerous outcome measures and other factors encompassed by our conceptual model and that were included in the wide array of analyses of Mountain-Plains' effectiveness that led to this report. We turn now to a discussion of the methodology employed in our evaluation of the Mountain-Plains program.

METHODOLOGY

In this section we describe the methodology employed in conducting the evaluation of Mountain-Plains' effectiveness in enhancing the QOL of its participants after they had left the program. We first describe the research design as it was originally conceptualized in its ideal form by NIE and the Research Services Division of Mountain-Plains, and then we turn to a discussion of the realities of the research situation as Abt Associates encountered them. The Follow-Up Study of program participants had been designed, and Mountain-Plains had been collecting follow-up interviews for three years (from February 1972 to February 1975) before Abt Associates began its data collection activities.

THE RESEARCH DESIGN AS ORIGINALLY CONCEPTUALIZED

The research design for the evaluation of Mountain-Plains as originally conceptualized by Mountain-Plains' Research Services Division and NIE was an elegant, sophisticated and powerful experimental design to be executed in a natural setting. Figure III-2 provides a graphic display of the nature of the idealized research design.

Families were screened for eligibility for entrance into the Mountain-Plains program (the experimental treatment). From the pool of eligible families approximately one-sixth were randomly assigned to the control group (non-treatment condition), and the remainder entered the program (the treatment, or experimental group). While the experimental

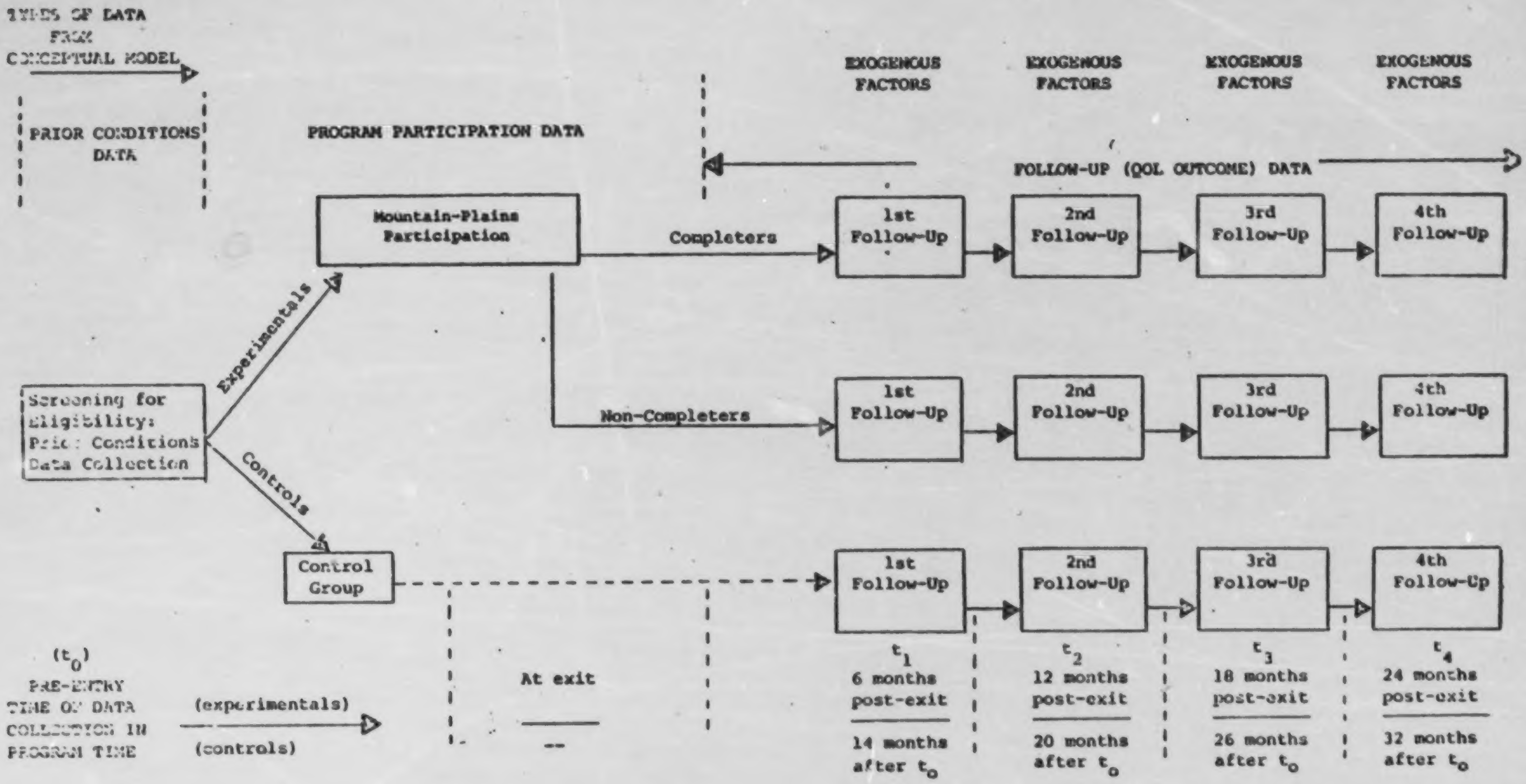


Figure III-2
Experimental Design Flow Chart

and control groups were created by random assignment from the pool of families defined as eligible for entrance into Mountain-Plains, this does not imply that the pool of eligible families was randomly selected from a readily definable population.

During the screening process members of the pool of eligible families (both experimentals and controls) were measured by Mountain-Plains on what we earlier defined as "prior conditions and characteristics," including demographic and some QOL measurements such as work and economic histories. It should be noted that the screening process was a continuous one, given the Mountain-Plains open-entry/open-exit policy. That is, there were no large cohorts of experimental or control group families. Rather, small groups of families entered the experimental and control conditions weekly.

After the screening process, experimental families entered Mountain-Plains and proceeded through the program components. Because Mountain-Plains tailored courses of study to meet individual needs, families took varying lengths of time to complete their programs. In addition, some families (referred to as "non-completers") did not complete their program and dropped out or were administratively exited after varying lengths of stay in the program. Regardless of the length of time spent in the program, experimental families (both completers and non-completers) were intended to be followed up four times, at 6, 12, 18, and 24 months after their exit from the program.

Families assigned to the control group were not measured again until 14 months after the time they were first measured. The 14-month time span was predicated on an average of 8 months spent in the program on the part of the experimentals. The follow-up interview in the 14th month after the initial measurement of controls, therefore, roughly corresponded to the average time after program entry for the 6-month post-exit measurement of experimental families.

In summary, these are the major attributes of the experimental design originally planned for the Follow-Up Study by Mountain-Plains and NIE:

- Random assignment of families to the experimental and control;
- Pretest and four sequential post-treatment measures at 6-month intervals after exit from the program for experimentals, with controls receiving the same measurements on a comparable schedule; and
- A continuous stream of entrants into, and exits out of, the Follow-Up Study due to the open-entry/open-exit policy of the program.

Implemented in its ideal form, this design would be very powerful in terms of controlling for sources of internal invalidity in the study and would, therefore, provide a strong basis from which to attribute cause for observed effects to program participation. The design did, however, have some idiosyncracies that complicated it, and it was not implemented in its ideal form for numerous reasons. In the following sections we discuss the idiosyncracies inherent in the design, the ways in which the actual implementation of the design fell short of the ideal, and the effects these factors had on our analyses.

REALITIES OF THE DESIGN: IDIOSYNCRACIES AND PROBLEMS IN IMPLEMENTATION

There were three major idiosyncracies inherent in the design and three major problems with the implementation of the design that could have ruined the study. We discuss below each of these considerations and the manner in which we dealt with them.

Confounding of Exogenous Factors with Program Effects

One of the design idiosyncracies which potentially could have invalidated an assessment of Mountain-Plains' effects was inherent in the design because of the open entry/open exit policy of Mountain-Plains, combined with the extended period of time (four years) over which the follow-up study was conducted. A small group of families entered the program on a weekly basis, and each family left the program after completing their individually tailored program of instruction (if they did not leave prematurely). This means that, as opposed to the research conveniences offered by traditional schools, there were no cohorts of students at Mountain-Plains. Instead, there was a continuous stream of entries into, and exits from the program. This continuous stream of entries and exits, coupled with the long period of time over which the study was conducted, almost assured that program effects as manifested at each of the four intended follow-up measurement times (6, 12, 18 and 24 months after exit from the program) would be confounded with the effects of fluctuations in environmental (exogenous) factors. This would occur because of the two different types of "time" implied in the design -- program time and environmental time. "Program time" refers to the six month intervals from date of program exit specified in the design for taking follow-up measures. The use of program time in the design was necessary to determine if the magnitude of program effects changed depending upon how long a participant had been out of the program. "Environmental time," however, refers to calendar time and carries with it the fluctuations in relevant factors in the environment (such as inflation and unemployment rates) that could have a strong effect on many of the same outcomes Mountain-Plains was trying to affect. Between February 1972 and June 1976 inflation forced average hourly wages up by over 25 percent, at a steady rate of increase. In the six state region served by Mountain-Plains, unemployment rates showed constant cyclical fluctuations corresponding to the agricultural season over the same four years.

The design focussed on measuring program effects at 6, 12, 18 and 24 months post exit (program time). However, some six month measures took place in August 1972, some in April 1974, some in June 1976, etc., over a four year span of time. The same dispersion across calendar, or environmental time, was true for 12, 18 and 24 month interviews, thus forcing a confounding of effects due to participation in the program with the effects of changes in the environment.

The analytical problem raised by this aspect of the design is how to render comparable for purposes of analysis, say, income or employment data from six month interviews conducted at widely separated points in calendar time. To handle this problem we standardized all income data to June 1976 dollars using the "Hours and Earnings Index" developed by the Bureau of Labor Statistics. The actual procedures are discussed in Appendix III-G. In addition, we included in all of our analyses the unemployment rate for the month and state in which an interview was conducted in order to take into account the effects of these fluctuations on outcome measures.

The Problem of Program Completers and Non-Completers

A second problem, and one particularly important in assessing the efficacy of the program, was introduced by the fact that 26 percent of the participant families left Mountain-Plains before completing their course of treatment and study (families we refer to as "non-completers"). It has been suggested that such a high drop-out rate is itself a serious indictment of the effectiveness of Mountain-Plains. This may be a valid claim. However, the problem may be as much with the client population as with the program. We know from our comparative case studies, which included four other programs similar to Mountain-Plains, that this high of a drop-out rate is not atypical for this type of program. The drop-out rates for the other programs were: Arizona Job Colleges, 47%; Madiera Employment Training Center, 15%; Manpower, Employment and Training, 23%; and Migrant and Seasonal Farmworkers Association, 18%.

The existence of such a large group of non-completers did, however, immediately raise a question about how to assess the program's effectiveness. Should we assess Mountain-Plains' success by analyzing completers and non-completers together as a single group? Abt Associates argued that, yes, we should look at the program's effectiveness from this perspective. After all, Mountain-Plains screened their applicants and only those families the program staff thought could benefit from participation in the program were admitted. In addition, the program expended large amounts of its resources on non-completers (an average of $9,843 per non-completer family). We also argued that, additionally, we should assess Mountain-Plains' effects on both completers and non-completers separately.

By examining effects on all participants as a group, and on completers and non-completers separately, we would have the comprehensive picture of Mountain-Plains' effectiveness. The assessment of all participants as a group would provide the global statement of the program's effectiveness, while the assessment of effects on completers by themselves would indicate the maximum effects obtained by the program. The assessment of non-completers would indicate whether the program had a reduced effectiveness on drop-outs or did them any damage.

Thus there were three participant groups of basic interest involved in the research design: all participants as an undifferentiated group, completers, and non-completers. One effect of this situation was to multiply by three the number of analyses of outcome measures necessary to document Mountain-Plains' effectiveness. It also had a profound effect on the treatment of the control group in our analyses, a problem we discuss in the subsequent section dealing with the comparability of the participant and control groups.

The Problem of One-Parent and Two-Adult Families

We use the terms "one-parent" and "two-adult" because at Mountain-Plains a family with both the husband and wife present might, or might not, have had children. On the other hand, the program accepted only families. Therefore an unmarried adult (all of whom were divorced) had to have one or more children in order to be admitted into the program. Nearly all one-parent families were headed by females. From very early on in the Follow-Up Study we were aware that there were significant differences in the life circumstances of one-parent and two-adult families that would be confounded with the effects of the Mountain-Plains program on key outcome measures. One needs only to consider the predicament of a woman with two or three young children and no husband when it comes to working at a job. At best, it is extraordinarily difficult to find and hold a job that pays well enough to support the family after child care expenses are paid, particularly when discounted by potential receipts from welfare sources if not employed, plus the personal and familial aggravations involved in not being readily accessible to the children on an as-needed basis. Because of the potentially very great disparity in program effects on one-parent and two-adult families (plus some logistical/analytical problems) Abt Associates and NIE decided that program effects should be analyzed separately for one-parent and two-adult families.

Originally there were 46 QOL outcomes in the list of measures to be used to assess the effectiveness of the Mountain-Plains program. However, 30 of the 46 measures were based on individuals (the HOH and the spouse), as opposed to the family, as the unit of analysis. Therefore there were 76 outcome measures to analyze for two-adult families, and 46 for one-parent families. When we combine this fact with the decision to assess program effects separately for all participants and for completers and non-completers separately, the real number of outcomes expanded dramatically -- instead of the original 46 outcomes we have analyzed some 336 outcome measures during the course of our assessment of Mountain-Plains' success in reaching its goals for its participants. The analyses and results presented in this report represent an extreme distillation of these analyses without changing the essence of our findings or conclusions regarding the effectiveness of the Mountain-Plains program.

The Logic of Proof and the Control Groups

As a summative evaluation of the Mountain-Plains program, the primary purpose of this study is to determine whether, and in what areas, Mountain-Plains had positive or negative effects on its participants. A critical question that arises from this charge is:

- How did we decide whether Mountain-Plains had positive effects, no effects, or negative effects on its participants?

Since the answer to this question involves the use of a control group as a basis against which to compare the progress of the participant group, a second question arises:

- Did the control group provide a valid basis against which to compare the progress of the participant group?

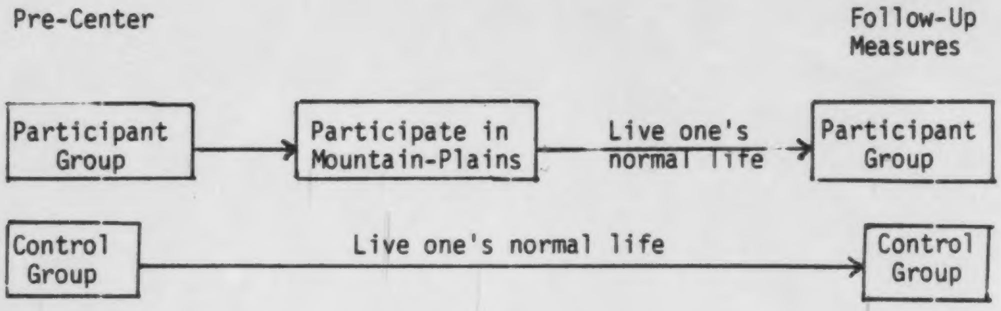
The following sections provide a discussion of the answers to these two questons.

The Logic of Proof for Program Effects

From a logic-of-proof perspective, some of the most compelling arguments for the existence or absence of a treatment effect (Mountain-Plains is the "treatment") can be derived from an experimental/control pretest/posttest design. Such a design is represent schematically in Figure III- 3.

Figure III- 3

Schematic Representation of an Experimental/Control Pretest/Posttest Design



This paradigm provides a fair representation of the de facto research design used to evaluate the Mountain-Plains program. The logic of proof involved in using this design and its associated tests of statistical significance demands that the treatment and control groups be created by randomly assigning subjects in the experiment to one or the other of the two groups. The purpose of random assignment of subjects to groups is to randomly distribute characteristics of subjects that are not measured but that may be related to, or affect, the outcome measures to be observed after the treatment has been administered. If random assignment to the groups is accomplished, we can justify the use of statistical tests of significance as aids in deciding whether observed differences between the two groups are large enough to be attributed to the treatment effect, or whether they are so small they should be considered a function of "randomization error" (as opposed to "sampling error" when a random sample is drawn from a population). Random assignment of subjects to treatment groups is considered logically analogous to random sampling from a population, and inferential statistics provide a usable approximation of specific randomization tests.*

Assuming that participants were randomly assigned to the experimental and control groups, the logic of the proof of the existence of effects due to the program (either positive or negative) is as follows.

First, we compute the pre-Center to follow-up change in the variable of interest (let's use change in employment earnings for the example) for each family. We then find the mean (average) change from pre-Center to follow-up for the participant group and for the control group separately. Next, we compare, using a statistical test, the average pre-Center to follow-up change in employment earnings for the participant group with the average change for the control group. The statistical test tells us the probability that the observed difference between the average change in employment earnings for the participant group and the control group is really greater or less than zero, as opposed to being a function of random errors in the assignment of families to the participant and control groups in the first place.

For example, suppose that we observed a difference between the average changes in employment earnings of participants and controls equal to $10 per month, in favor of the participant group. Suppose further that our statistical test told us that the probability of finding a difference between the two groups of $10 per month, due simply to random fluctuations in the assignment of families to the participant and control groups, was .50. This means that if we took the same groups of participants and controls, and started over by re-assigning them randomly to the participant and control conditions, and took the same measurements and computed the same average changes, there would be only a 50-50 chance that we would still find the participant group to be $10 per month or more ahead of the control group in employment earnings. As a matter of fact, the second time around we could just as well observe the control group to be ahead of the participant group by, say $5 per month. We therefore would have little confidence that the observed $10 per month difference between particpants and controls was due to anything other than the random chance which families originally got assigned to either group.

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* Edgington, Eugene S. "Statistical Inference and Nonrandom Samples," Psychological Bulletin, (1966) 66: 485-487.

Suppose on the other hand, that we had observed a $99 per month difference in change employment earnings, in favor of the participant group. Suppose, also, that this time our statistical test told us that there was only a 5 percent chance that this $99 per month greater gain that participants showed over the controls was due to the random assignment of families to the two groups. This means that an average of 95 out of every 100 we randomly re-assigned the same overall group of families to the participant and control groups, and re-computed the difference of the average changes in employment earnings between the groups, the participant group would show greater gains than the control group. In this case we would feel quite confident (95 percent sure, to be exact) that the $99 per month was due to some factor other than the chance assignment of families to the participant or control groups.

Note that we said we would be 95 percent sure that the observed difference was due to some factor other than chance. A statistical test only provides one with a statement about the probability that an observed difference is not due to the chance of random assignment -- it does not provide any information about what caused the observed difference. This brings us to the second aspect of the logic involved in proving that any observed effects were caused by participation in the Mountain-Plains program (as opposed to factors irrelevant to an assessment of the success of the program, such as the phenomenon of personal maturation, which we noted earlier).

Attribution of cause is a logical deduction from a set of facts, rather than a statistical inference. It is the comparison of the participant group with the control group that allows us to attribute cause to Mountain-Plains for any observed changes in the participant group. To make the participant/control comparison we make the assumption that the two groups are similar in terms of all essential characteristics except one -- the participants experienced the Mountain-Plains program, but the controls did not. Therefore any observed differences between the groups in their average values on outcome measures are caused by participation in the program.

To illustrate the importance of the control group in the logic of proof (attribution of cause) for program effects, let us return to changes in employment earnings. Suppose that we found that participants showed an average loss in employment earnings of $150 per month, as measured from pre-Center to follow-up. This amounts to an average loss in employment earnings of $1,800 per year! If Mountain-Plains were able to accomplish this feat, it most certainly should be proclaimed a resounding disaster -- and without the presence of a control group with which to compare this loss, one would be nearly forced to so proclaim. However, we do have a control group. Suppose we found that the control group showed an even worse average loss in employment earnings of, say, $200 per month ($2,400 per year), and that our statistical test told us the $200 - $150 = $50 per month difference was not likely to be due to chance.

Behold, we would be in a position to forcefully argue that Mountain-Plains was actually successful. Certainly, something terrible was happening to all those families, but Mountain-Plains participants surely were faring better than their control group counterparts -- because of their participation in the program.

While this tale illustrated the importance and utility of the control group, it is important to note that we have been talking about comparing the average (mean) change scores for the participant and control groups in order to establish a basis for attributing cause to the program.

There is a potential pitfall in attempting to attribute cause to the program of which the reader should beware. Return again to our example of changes in employment earnings. Suppose this time that the participant and the control groups both showed gains in employment earnings of $10 per month, and we concluded there was no program effect on this measure. Suppose further that among the participants the changes in employment earnings for individual families ranged from a loss of $75 per month to a gain of $200 per month, with about 40 percent of the families showing substantial gains, and another 40 percent showing losses.

It has been argued* that, given this situation, there is an alternative interpretation of the effectiveness of Mountain-Plains, to the effect that:

> What do you mean, Mountain-Plains didn't help its participants just because, on the average, there was no effect? This analysis is a victim of the "tyranny of the mean." Over 40 percent of the participant families showed substantial gains in their earnings from employment. Therefore Mountain-Plains was a success with over 40 percent of its clients, and given the nature of the problems with which the program was dealing, that's a pretty good rate of success!

This argument is seriously flawed, both from a logic of proof perspective and in terms of the assessment of the program's success, even if the logic were correct.

The logic of proof flaw first. This argument ignores the existence and purpose of the control group -- which is there for a basis of comparison. Suppose the distribution of changes in earnings from employment were very similar to that described above for the participant group. Under this condition there is no basis for attributing to participation in Mountain-Plains the cause for the gains in employment earnings shown by the 40 percent of participant families who enjoyed them, unless we also are willing to attribute the cause for the gains among the control group to their participation in the Mountain-Plains program -- a step we define as being of dubious value.

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* Two members of a panel of experts convened by NIE to review a draft of this report in April 1977 vehemently argued for this approach to interpreting the data.

The second flaw is a problem of correctly assessing the program's success on the basis of this type of reasoning, if we assume that the logic for attributing cause is correct. If we ignore the control group and accept the conclusion that the gains in employment earnings shown by our hypothetical 40 percent of the participant families were caused by their participation in the Mountain-Plains program, we are left with an unavoidable and unpleasant situation. We are then obliged to acknowledge that the program also was responsible for the loss of employment earnings displayed by 40 percent of the participants. We are then forced into a position of attempting to decide if a program is worthwhile that helps 40 percent of its participants while it is damaging another 40 percent. The dilemma is severe but, fortunately, the line of reasoning that led to it is fallacious.

All of this is not to argue that participation in a program such as Mountain-Plains is not beneficial for some families and detrimental for others. The simple fact is that such an assessment on a family-by-family basis requires an indepth, clinical type of data that simply is not available for this study.

Participant/Control Group Comparability

The preceding section emphasized the importance of the control group in determining if there was an effect on an outcome measure, and in attributing the cause for an observed effect to participation in the Mountain-Plains program. The efficacy of using the control group for these purposes hinges to a great degree on the comparability of the participant and control groups before the participants entered the Mountain-Plains program. Ideally, the participant and control group should be "exchangeable"* with respect to all factors relevant to the outcome measures so that any difference between the two groups on outcome measures not attributable to chance could reasonably be attributed to the program. The ideal is rarely achieved in reality. Therefore, in this section we discuss the comparability of the participant and control groups in this study.

In the evaluation of Mountain-Plains, the question of the comparability of the participant and control groups is not quite as straightforeword as it seems. You will remember that we found it necessary to analyze program effects separately for all participants, completers and non-completers. Further, we found it necessary for substantive reasons to analyze program effects separately for one-parent and two-adult families within each of these three groups.

Since random assignment is the best tool for achieving "exchangeable" participant and control groups the question arises, "Were subjects in the evaluation study randomly assigned to the control and participant groups?" We know the original intent was that they should be. We also know from an examination of Mountain-Plains' original interview protocols that in some instances random assignment to the control and participant groups did not occur. We are also confident that in a large majority of cases randomization was the procedure used for group assignment. As a check on the results of the "partially random" assignment procedure used by Mountain-Plains, we compared the total control and participant groups on a list of 58 characteristics as measured at pre-Center to determine if the two groups were essentially similar. As a result of these univariate comparisons, we found there to be statistically significant differences between the participant and control groups on nine pre-Center measures (the full set of comparisons may be found in Appendix III-A, Table IIIA-1):

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* The concept of exchangeability was introduced by Bruno de Finetti. See Encyclopedia of Social Sciences, (1968) Vol. 12: 501.

1) Sex of the HOH,
2) Marital status,
3) HOH's total employment earnings during the year prior to the pre-Center interview,
4) HOH's monthly salary at the current or most recent job at the time of the pre-Center interview,
5) Occupational prestige of the spouse's current or most recent job at the time of the pre-Center interview,
6) Spouse's monthly salary at her current or most recent job at the time of the pre-Center interview,
7) Total family earnings from employment during the year prior to the pre-Center interview,
8) Total family income from all sources during the year prior to the pre-Center interview, and
9) Family per person employment income during the year prior to the pre-Center interview.

The reader will note that several of these measures are so highly interrelated as to be essentially the same thing. For instance, if a male was present in a family he was designated the HOH, and all female HOH's were divorcees. For HOH's, we would expect monthly salary and total employment earnings both to show differences if one did, etc. Essentially, we found that controls had a percentage of female HOHs (participants = 20%, controls = 29%), and participant families had slightly higher annual incomes from all sources (participants = $4,000, controls = $3,650). The difference in percentages of female HOHs was a serious problem and probably caused most of the $350 difference in annual income. But analyzing one-parent and two-adult families separately (a decision we originally made for substantive reasons) takes care of the statistical problem. Basically, the results of these comparisons led us to believe that the participant and control groups were effectively randomly assigned and that the two groups are sufficiently similar to provide a valid basis for comparisons.

But who should be used as a control group in the analysis of program impacts on completers and non-completers? We tried comparing completers vs. non-completers vs. the entire control group on the same set of 58 pre-Center measures used to examine the comparability of all participants and all controls. The results were disastrous -- the three groups were significantly different on 33 out of the 58 measures.* It was apparent that the control group per se did not provide a valid basis of comparison for either the completer or the non-completer group.

We therfore decided to partition the control group into a "completer control" group and a "non-completer" control group. The sophisticated statistical procedures used to accomplish the partitioning of the control group are described in Appendix III-A. Although the statistical procedures were sophisticated, the idea behind the process is straightforward.

Using the total participant group, we first identified those pre-Center characteristics that discriminated between completers and non-completers. The five best discriminating characteristics were: (1) the years of education completed by the HOH; (2) whether the family owned or rented their housing, or they lived in someone else's home; (3) the number of children in the family: (4) whether the HOH was white or some other race; and (5) the total family income from all sources for the year prior to their pre-Center interview. We then dichotomized these five variables and created 32 profiles of family characteristics using the various combinations of the five dichotomized variables. The probabilities of families completing the program were then estimated for each of the 32 profiles of characteristics, using the 914 known completer and non-completer families in the participant group. Families in the control group were then classified into the appropriate profile and assigned the probability of being a completer associated with the profile.

For various reasons (discussed in Appendix III-A) all control families with profiles of characteristics that had an estimated probability of completing the program of .61 or higher were assigned to the "completer control" group, and all control families with an estimated probability of completing equal to .82 or lower were assigned to the "non-completer" control group. You will notice that, as a result of these cutoff points, some control families were assigned to both the completer control group and to the non-completer control group. Although this overlap is unusual, it is appropriate for the present situation. First, no statistical problem was caused by the overlap since we conducted our analyses of program effects on completers and non-completers independently of each other. Second, since the objective of partitioning the control group was to define valid comparison groups for program completers and non-completers, we assessed the success of our partitioning procedure in terms of how few statistically significant differences we found in a new set of completer vs. completer control and non-completer vs. non-completer control comparisons.

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* The full set of completer/non-completer/control comparisons may be found in Appendix III-A, Table IIIA-2.

The results of these comparisons may be found in Appendix III-A, along with the original all participants vs. all controls comparisons. In short, the partitioning procedure worked extremely well. The completer vs. completer control comparisons showed only two significant differences: percent of female HOHs (completers = 21%, completer controls = 30%); and the HOH's monthly salary at the current or most recent job (completers = $389, completer controls = $344). However, because of the lower proportion of female HOHs in the completer group and the fact that female HOHs on the average earn less than male HOHs, these two differences disappear when we analyze one-parent (female-headed) and two-adult (male-headed) families separately.

The Problem of Attrition

You will remember from our earlier description of the idealized research design, that both participants and control families were supposed to receive five interviews each: a pre-Center interview followed by four follow-up interviews at six-month intervals after exit from the program (and a comparable schedule for controls). For the purpose of this discussion, we define a family as being attrited if it was missing any one or more of the four follow-up interviews implied by the ideal research design.

A high rate of attrition can completely destroy the validity of the conclusions drawn from the best of research designs. Even given initial random assignment of subjects to the participant and control groups, the assessment of program effects could be biased because of attrition. The four-cell matrix below presents the combined possibilities for attrition from the control and participant groups.

		ATTRITION FROM PARTICIPANT GROUP	
		Random	Non-Random
ATTRITION FROM CONTROL GROUP	Random	(a)	(b)
	Non Random	(c)	(d)

Only in the case of cell (a) -- where attrition from both groups is random -- is attrition not a problem in terms of producing biased estimates of program effects. If attrition from both groups has been random, we are left with a random sample of the original study population. In cells (b), (c), and (d), where attrition from one or both of the groups is non-random, we are left with a biased subset of the original study population, and estimates of program effects are likely to be biased.

How extensive was attrition from the follow-up interview stream? Table III-2 on the following page shows the follow-up interview histories for the families included in the study. The first interview history in Table III-2 (indicated by: 1 1 1 1) represents the ideal situation -- these families received all four follow-up interviews, whereas the last interview history (represented by: 0 0 0 1) indicates these families received only the 24 month interview and were missing their 6, 12 and 18 month interviews.

An inspection of Table III-2 shows that there was extensive attrition from the follow-up interview stream -- 49 percent of the families received only one of the intended four follow-up interviews, and only 10 percent received all four. About 40 percent received one of the several possible combinations of two or three interviews. This amount of attrition may seem to be overwhelming, as opposed to merely extensive. However, let us examine the reasons for the attrition, some of which are a cause for concern about bias in the results of analyses, and some are not.

There are two primary causes of attrition from the follow-up interview stream. First, you will remember that Mountain-Plains staff had been conducting follow-up interviews for about three years before Abt Associates assumed responsibility for follow-up data collection. During that period of time, Mountain-Plains staff conducted only 49 percent of the follow-up interviews that should have been conducted according to the research design (551 interviews conducted, 1,124 should have been conducted). We know of none of the specific reasons for this situation. We do know, however, that the Mountain-Plains staff were not sophisticated in large scale data collection, that they had very poor records for the purpose of locating families, and that the resources available for conducting follow-up interviews were limited (if not very inadequate). These factors probably resulted in Mountain-Plains staff conducting follow-up interviews with families whenever they happened to find one.

The second major cause of attrition from the follow-up interview stream was a function of the open entry/open exit policy of the program, coupled with the duration of Abt Associates' data collection activities. When Abt Associates ceased its data collection activities in June 1976 many families had received one or more follow-up interviews. When data collection ceased, however, these families obviously did not receive the remainder of the interviews required by the original design, and were defined as attrited. For example, if Abt Associates had conducted a 6 month and a 12 month interview with a family and then data collection was stopped before the 18 month interview was due, the family was defined as missing its 18 and 24 month interviews (attrited). Some 413 (or 62%)

Table III-2

Follow-Up Interview Histories from Merged Mountain-Plains and Abt Associates Inc. Data Files

INTERVIEW HISTORY 6	12	18	24	ALL PARTICIPANTS	ALL CONTROLS	COMPLETER PARTICIPANTS	COMPLETER CONTROLS	NON-COMPLETER PARTICIPANTS	NON-COMPLETER CONTROLS	TOTAL*
1	1	1	1	38	30	24	22	14	19	68
1	1	1	0	53	11	40	5	13	10	64
0	1	1	1	9	5	7	4	2	4	14
1	1	0	1	15	5	11	5	4	3	20
1	1	0	0	88	11	65	8	23	10	99
0	1	1	0	5	10	4	7	1	7	15
1	0	1	1	2	0	2	0	0	0	2
0	0	1	1	1	0	1	0	0	0	1
1	0	0	0	233	17	169	15	64	10	250
1	0	1	0	30	0	22	0	8	0	30
1	0	0	1	10	4	4	2	6	4	14
0	1	0	1	8	1	2	0	6	1	9
0	1	0	0	28	21	20	20	8	13	49
0	0	1	0	13	8	8	7	5	4	21
0	0	0	1	2	3	0	2	2	3	5
		N =		535	126	379	97	156	88	661

*Total = All Participants + All Controls. Completer Control and Non-Completer Control groups are overlapping subsets of All Controls.

of the families suffered from this type of "attrition." This may seem to be a strange situation to include in our definition of attrition, since the family received all interviews for which it was scheduled. We included this situation in our definition of attrition, not because of concerns about bias, but because it literally makes it impossible to conduct the repeated measures analyses implied by the original design.

The Follow-Up Study also had attrition due to the usual causes: a few families refused to be interviewed; several families could not be found (usually due to an old or insufficient address provided by Mountain-Plains to Abt Associates); several families moved out of the six state area in which data collection was conducted; and in a few instances, interviews were not attempted, even though a family was found, because the situation looked too dangerous to the interviewer.

Since non-respondents often differ from respondents in many important ways, the attrition problems noted above could have created at least two methodological problems:

- Biased estimates -- levels on outcome measures such as, say, monthly employment income for interviewed families might have provided biased estimates of corresponding levels of all participants, all completers, all controls, etc.
- Misleading comparisons of repeated measures -- the data at the 6, 12, 18 and 24 month time points came from varying numbers of families and (except for those few families who received all four interviews) might not represent the same families. Thus, a comparison of estimated program effects at each time point based only on families interviewed at those time points could well be misleading since the estimates would be based on different subsets of families.

To assess the effect of attrition we conducted analyses to determine which pre-Center characteristics of subjects were correlated with attrition. The results indicated that none of the available characteristics were significantly correlated with attrition.

We did, however, develop a weighting scheme using two variables to take attrition into account in estimating program effects. We selected the variable with the highest correlation with attrition -- whether a family had lived in only one, or more than one, state in the five years prior to its pre-Center interview -- as the first variable. As the second variable we used the family's experimental status -- participant or control -- because of the importance of the comparability of the participant and control groups.

We then conducted three different types of analyses on three HOH outcome measures: average monthly employment earnings; occupational prestige; and weeks unemployed. The first type of analysis was a repeated measures analysis in which we used only HOHs for whom we had three consecutive (6, 12 and 18 month) interviews. The second set of analyses consisted of unadjusted analyses of the data from 6, 12 and 18 month interviews, employing all HOHs for whom we had an interview at each time point. This approach made no adjustment for attrition, but used all available interviews. The third set of analyses was weighted for attrition. In this approach we used all available interviews (as in the unadjusted analyses) but we weighted the existing interviews to take into account the missing 6, 12 and 18 month interviews. We then compared the estimates of program effects provided by each of these three analytical approaches for each of the three outcome measures (the details are presented in Appendix III-B). We concluded that:

- The unadjusted and the attrition-weighted analyses provided estimates of program effects that were materially the same.
- Repeated measured analyses, using only those who have complete sets of consecutive interviews, provide distorted estimates of program effects.

As severe as the attrition problem appears to be in this evaluation, attrition appears to be due to so many diverse factors that potential sources of meaningful bias cancel each other out. For this reason, we decided to conduct our analyses using all available interviews, without weighting them for attrition.

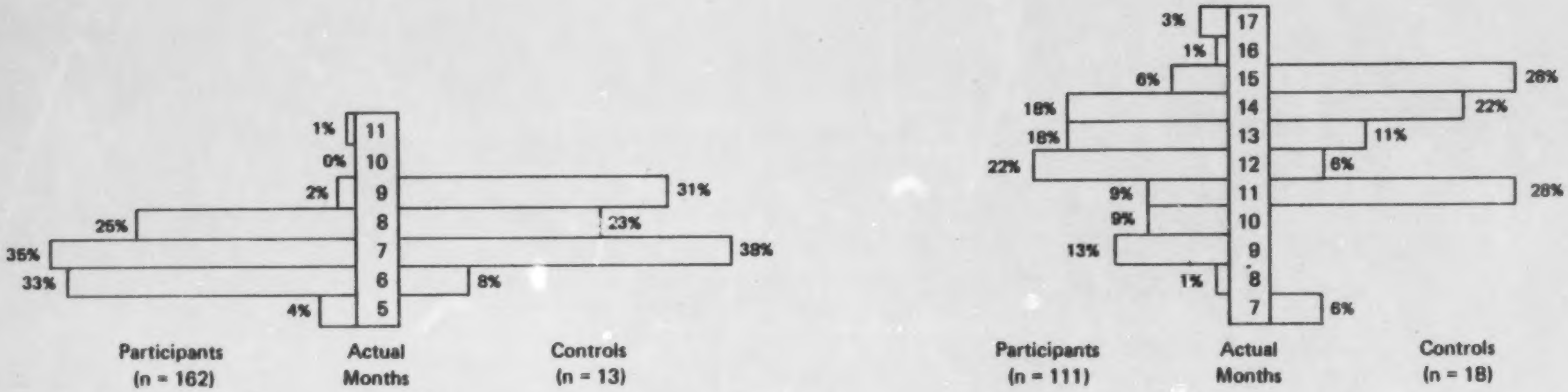
The Problem of (Non) 6, 12, 18 and 24 Month Interviews

Again, remember the original design, which required follow-up interviews at 6, 12, 18 and 24 months after exit from the program. Based on this schedule for follow-up interviews, the intent was that program effects would be analyzed, using repeated measures procedures, over the same time points in order to determine whether initial program effects would increase, remain constant, or decrease over time. We have already noted that the repeated measures aspect of the design was destroyed by the problem with attrition.

The idea of analyzing program effects at 6, 12, 18 and 24 months after exit from the program also went by the wayside. Figure III-4 on the following page shows the distribution, in terms of months out of the program, of the times at which nominal 6, 12, 18 and 24 month interviews actually were conducted. Six month interviews were conducted from 5 to 11 months post-exit, 12 month interviews from 7 to 17 months, 18 month interviews from 15 to 23 months, and 24 month interviews from 21 to 34 months. In terms of months out of the program we had interviews for every month from 5 to 34 (with the exception of the 33rd month). Therefore, it became both arbitrary and distorting to attempt to classify many interviews into the 6, 12, 18 or 24 month time blocks.

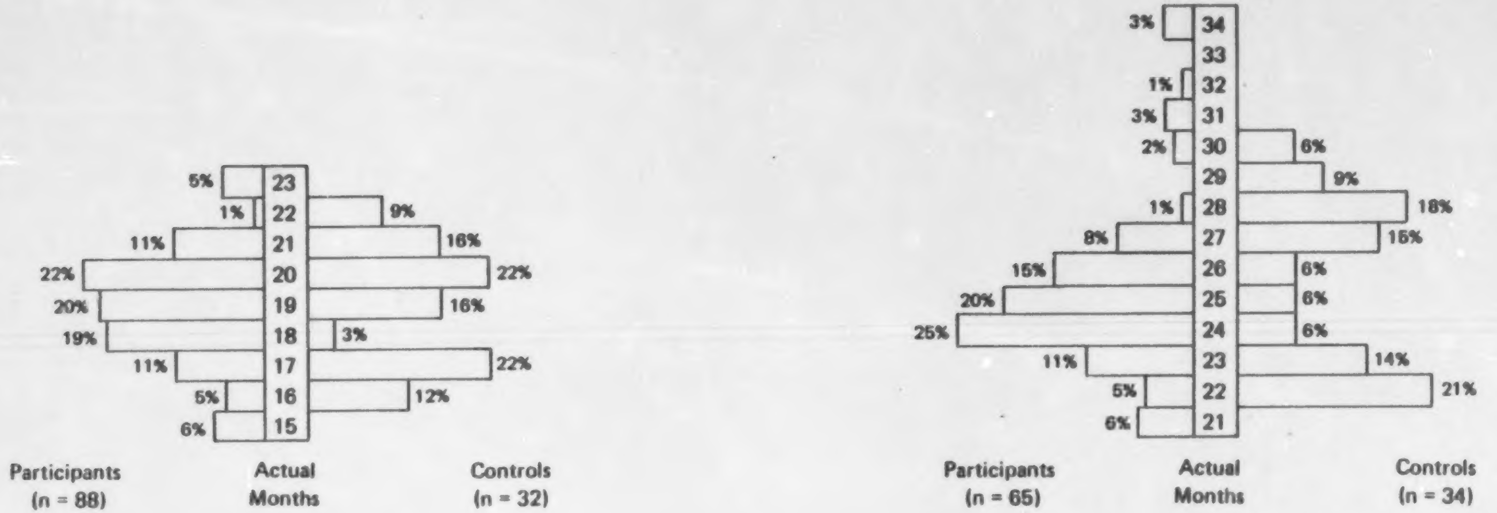
While this situation did damage to the original intent of the design (to conduct analyses of program effects blocked on the four follow-up time points), it caused no real analytical problem. We simply analyzed program effects using time out of the program as a continuous,

Figure III-4
Actual Length of Time Out of Program (in Months) Within
Nominal 6, 12, 18 and 24 Month Interview Periods



A. NOMINAL 6 MONTH INTERVIEW

B. NOMINAL 12 MONTH INTERVIEW



C. NOMINAL 18 MONTH INTERVIEW

D. NOMINAL 24 MONTH INTERVIEW

rather than discrete, variable.

You probably wonder how the follow-up interviews got so far off schedule. It goes back to the inital three years of follow-up data collection conducted by Mountain-Plains. The families in this study were highly mobile and were dispersed across a vast geographic area. This fact, coupled with Mountain-Plains' limited resources for, and naivete about, large-scale data collection, simply resulted in families being interviewed by Mountain-Plains whenever a staff member was travelling nearby a family that had not been interviewed recently. Abt Associates designed a sophisticated, computerized tracking and scheduling system that produced weekly reports showing who was to be interviewed six weeks in advance. Unfortunately, for those families who had already received one or more interviews by Mountain-Plains when we set up the tracking and scheduling file, Abt Associates had no basis other than the date of the most recent interview administered by Mountain-Plains upon which to schedule subsequent interviews.

Again, this situation did no damage to the value of the analyses that could be performed on the data, it simply called for a slightly different type of analysis.

THE DATA AND DATA COLLECTION PROCEDURES AND RESPONSIBILITIES

As was discussed above there were four major types of data collected for use in this evaluation:

(1) Prior Conditions/Characteristics (i.e., the pre-Center data);

(2) Program Participation data;

(3) Follow-up (Quality of Life Outcome) data; and

(4) Exogenous Factors data.

The data were generally collected via personal, face-to-face interviews. Mountain-Plains was responsible for collecting Prior Conditions and some measures in the economic and work domains. This was done when each family was screened for entry, using the pre-Center Interview Protocol developed by Mountain-Plains, reproduced in Appendix III-E of this report. Mountain-Plains was also responsible for collecting program participation data, including program status: completer, noncompleter, or control.

From the inception of the program through 7 February 1975, follow-up data were collected by Mountain-Plains staff using an interview protocol nearly identical to the Mountain-Plains Pre-Center Interview Protocol. The data available from Mountain-Plains' follow-up data collection activities are therefore the same as those described above.

As of February 1975 Abt Associates assumed the responsibility for collecting follow-up data, which continued through June 1976. Each domain of quality of life as well as demographic characteristics and educational level of each household member was assessed using the Follow-Up Study Interview Protocol and the Personal Supplement to the protocol, both developed by Abt Associates. Copies of these instruments are presented in Appendix III-F. Data for the interview protocol were gathered in personal interviews with the man and woman of the house, while the Personal Supplement was self-administered separately by the man and woman of the house during each follow-up interview.

Abt Associates was also responsible for obtaining data on exogenous factors from appropriate secondary sources. State unemployment rates for the month of each interview were obtained from the Bureau of Labor Statistics and/or state Departments of Employment Security. The Hours and Earnings Index used to standardize income data to a base year was obtained from the Monthly Labor Review published by the Bureau of Labor Statistics.

It should be noted that Mountain-Plains collected all of the pre-Center data for this evaluation, as well as the follow-up data for a period of 36 months (from February 1972 until February 1975), at which time Abt Associates Inc. (AAI) began follow-up data collection with an expanded set of instruments. While the follow-up instruments developed by AAI provide measurement of a substantially broader range of program outcomes than the Mountain-Plains instrument, the shift in instrumentation also created some areas of incompatibility, or non-overlap, between the data collected by Mountain-Plains and those collected by Abt Associates.

The important point regarding the areas of data compatibility and non-compatibility is that they affected the number of respondents and the type of analysis available for assessing program impact on a specific outcome measure. For those components covered by both Abt Associates and Mountain-Plains data we had a larger number of respondents available than for those components covered only by the Abt Associates data. When a component was covered by both sets of data we computed change scores. For the components covered only by the Abt Associates data our analyses relied only on follow-up participant/control comparisons for the assessment of program effects.

THE OUTCOME MEASURES PRESENTED IN THIS REPORT

Earlier in this chapter we discussed the broad range of outcome measures that we analyzed in our search for the effects of participating in the Mountain-Plains program. We analyzed these outcomes separately for all participants, completers and non-completers, as well as separately for one-parent and two-adult families within each of these three groups, and separately for the HOH and spouse when the most logical unit of analysis was the individual person rather than the family as a unit. We also noted that the outcome measures presented in this report constitute an extreme distillation of these earlier analyses. In this section we discuss the outcome measures used in the analyses for this report and our rationale for using them. Appendix III-G contains a listing of the numerous other outcomes we examined in our search for program effects.

In Chapter IV we present the results of our analyses of six outcome measures that address the most critical goals of the Mountain-Plains program:

1) Change in the average monthly employment earnings of the family (HOH and spouse averaged for two adult-families);

2) Change in families' average monthly income from welfare sources;

3) Change in number of weeks employed -- on a 6-month basis -- (HOH and spouse averaged for two-adult families);

4) Change in occupational prestige of jobs held (HOH and spouse averaged for two-adult families);

5) Level of well-being of the family as a unit (HOH and spouse scores averaged for two-adult families);

6) Level of personal well-being of family members (HOH and spouse scores averaged for two-adult families).

All of these measures consider the family (as opposed to the individual) to be the unit of analysis. Most readers will have no difficulty in accepting the family as the unit of analysis for changes in employment earnings, welfare income, or family well-being. There may be some hesitancy in accepting the average of the number of weeks the HOH and spouse were employed as well as the average of their occupational prestige scores. But using the personal well-being scores of the HOH and spouse, averaged together is almost certain to drive some readers to distraction. However, we have conducted all of these analyses for HOHs and spouses separately, and using an average of their scores produces identical conclusions regarding the effectiveness of the Mountain-Plains program.

Even if this were not the case, Mountain-Plains defined itself as a family program with the primary intent of rehabilitating families as units. Therefore we would argue that the family is the most appropriate unit of analysis for evaluating the effectiveness of the program, even if participation had differing effects on husbands and wives.

Let us examine the content of each of the six outcome measures. Changes in the average monthly employment earnings, average monthly income from welfare sources, and number of weeks employed are self-explanatory. Occupational prestige was measured using a scale which ranges from 0-99, developed by Nam and Powers using data from the 1970 Census. By way of illustration; judges, lawyers, physicists, astronomers, dentists, and university professors of education and law score 98 on the scale. Medical doctors score 99. Local public administrators = 77; restaurant managers = 63; sales clerks in food stores = 30; cashiers = 32, file clerks = 41, secretaries = 66; air conditioning repairmen = 54; automobile body repairmen = 37, shoe repairmen = 11; gas station attendants = 19; farm laborers = 2, cleaners and charwomen = 7. To assign occupational prestige scores to HOHs and spouses we matched the job titles and descriptions provided by respondents with the classification system developed by Nam and Powers.

The items included in the family well-being scale may be found in Appendex III-D, in the "Family Description" section of the Personal Supplement. For example, some items are:

> "Our family talks things out."
>
> "There is an opportunity for each member to express himself in his own way."
>
> "In our home, we feel loved."
>
> "There is a strong sense of belonging in our family."
>
> "We have many outside interests and activities."
>
> "In our family, children are to be seen and not heard."

The family well-being items were scored by the respondents on a five-point scale ranging from "Does not fit our family at all" to "Fits our family very well."

The items included in the personal well-being scale may be found in Appendix III-D in the "Self Description" section of the Personal Supplement. The personal well-being scale used in this report is a summary scale derived by principal components analysis of three scales from two nationally standardized personality test batteries used by Mountain-Plains: the Personal Orientation Inventory (the Self Acceptance and Self Regard scales); and the Sixteen Personality Factors (the Self Confidence scale). Some illustrative items are:

> "I am afraid to be myself."
>
> "I feel guilty when I am selfish."
>
> "I do what others expect of me."
>
> "I cannot cope with the ups and downs of life."
>
> "Criticism threatens my self-esteem."
>
> "I can accept my mistakes."
>
> "People should always repent their wrong-doings."

The reason we chose not to present in this report the numerous other outcome measures we have examined is disappointing but straightforeward: we could find no indication of program effects, positive or negative, that is not contained in the analyses of the six outcomes presented in Chapter IV. We could see little reason to include hundreds of pages of tables (or expend the scarce resources to create them) that would add no new information.

We chose these particular six outcome measures because they represent the most essential goals of the Mountain-Plains program. Change in weeks employed assesses the ability of the program to get participants into jobs, while changes in employment earnings assess increased economic viability. Occupational prestige assesses increases in the quality of working conditions and environment. Change in income from welfare sources assesses the program's ability to help participants become less dependent upon welfare and more self-sufficient economically. Enhanced family and personal well-being, while they are intrinsically worthwhile goals, were also seen by Mountain-Plains as necessary support for the economic and work goals.*

ANALYSIS STRATEGY AND PROCEDURES

Earlier in this chapter we presented a conceptual model of the factors involved in assessing the effects of participating in the Mountain-Plains program. A major point made in our discussion of the model was that there were numerous factors, extraneous to participation in Mountain-Plains, that could have affected the outcomes of interest in this study: the prior conditions and characteristics that study participants brought with them, the phenomenon of personal maturation, and environmental factors such as inflation and unemployment rates. In order to obtain the clearest picture of program effects on the outcomes of interest, it was necessary to first remove, or hold constant, the effects of these extraneous factors on the outcomes, and then examine the effects of the program on the statistically adjusted outcomes. The statistical procedure used to accomplish this task is called the analysis of covariance, which we conducted in a multiple regression/correlation (MRC) framework.

Analysis of covariance in an MRC format produces a wide variety of information that is useful in analyzing program effects. First, it fits a single regression equation whose coefficients tell us how much change in the outcome measure -- e.g., change in monthly employment earnings, change in weeks employed, level of family well-being -- is due to a unit change in any one of the predictor variables in the equation, with the effects of all other predictor variables in the equation held constant. If we code the predictor variable representing experimental status so controls = 0 and participants = 1, the regression coefficient for this variable is the difference between participants and controls (program effect) on the outcome measure, with the effects of all the other predictor variables (covariates) held constant. Suppose we were examining program effects on change in employment earnings, and we set up the following analysis of covariance regression equation:

---

* The computational formulae for the outcome measures are presented in Appendix III-F.

Change in Employment Earnings = constant
+ a (employment earnings at pre-Center)
+ b (inflation)
+ c (months out of program)
+ d (participant vs. control status)

Suppose that conducting the statistical analysis we obtained the following numbers for the coefficients represented by a, b, c and d:

Change in Employment Earnings = constant
- .26 (employment earnings at pre-Center)
+ .08 (inflation)
+ 5.76 (months out of program)
+ 9.99 (participant vs. control status)

How do we interpret these coefficients? First we should know if the coefficients are statistically significant (i.e., different from zero). The regression analysis provides two useful pieces of information about this question: a) the exact level of statistical significance for each coefficient is computed; and b) a (95%) confidence interval is fitted about each coefficient. We discussed the meaning of statistical significance earlier, but not confidence intervals. The level of statistical significance makes a single statement about the size of the coefficient and its exact level of significance. A confidence interval provides a more complete statement, given an a priori specified level of significance (say, .05) or desired level of confidence, (95%, if the level of significance is .05) about the size of a coefficient. A confidence interval places an upper and a lower bound about the estimated regression coefficient, thus providing information about how stable the estimate is. If the upper and lower bounds of the confidence interval include zero, we also know that the regression coefficent is not statistically significant (at the level specified for the confidence interval).

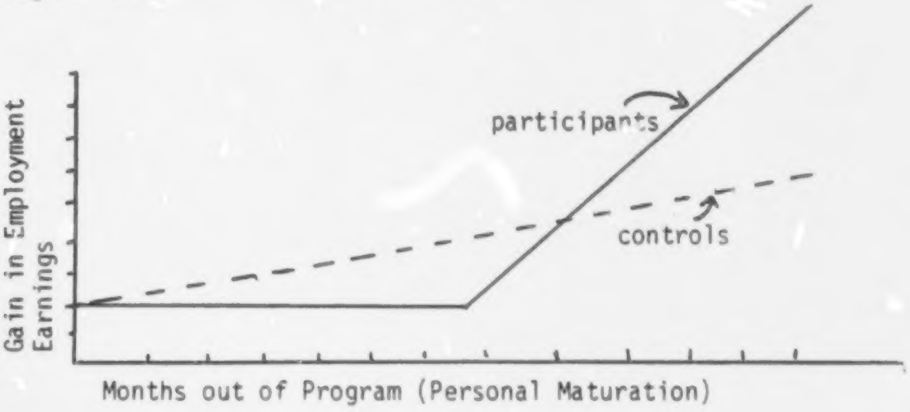
Suppose the 95% confidence interval about the estimated coefficient for participants vs. control status in the example above was 95% C.I. = $-22.57<9.99<41.26$, and the level of significance for the estimated coefficient was .34. On the basis of the level of significance of .34 we would, applying our criterion that the level of significance must be .20 or less, decide there was no program effect on change in employment earnings. Examining the 95% confidence interval, we would know that if we randomly reassigned the study participants to the program and the control group an infinite number of times and re-measured them, etc., 95 percent of the time the estimate of program effects on change in employment earnings would fall between a loss of \$22.57 per month and a gain of \$41.26 per month, holding constant the effects of pre-Center employment earnings, inflation and months out of the program. Note that the coefficient for the participant vs. control status variable is in the same metric (in this case, dollars) as the outcome measure, and is in terms of the difference between the participants and the controls.

Only the participant vs. control status variable shows the difference between the two groups. The regression coefficients for all the covariates are however in the same metric as the outcome measure and they are subject to the same tests of significance and confidence intervals as the participant/control variable. If they are significant, the interpretation of the coefficients for the covariates would be (for example, for pre-Center employment earnings): holding constant the effects of inflation, months out of the program and participant control status, respondents showed a loss (the regression coefficient is negative) of $.26 for each additional dollar of pre-Center employment earnings. Respondents also showed a gain of $5.76 in employment earnings for each additional month they were out of the program, when the effects of pre-Center employment earnings, inflation and participant/control status were held constant.

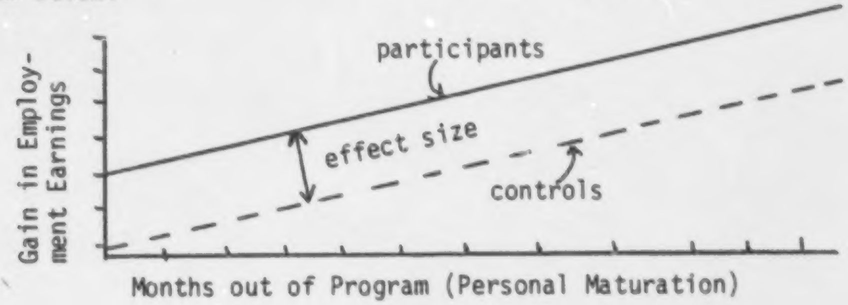
THE SEARCH FOR INTERACTION EFFECTS

In addition to the possible overall effects of the covariates, economic conditions, and personal maturation, we recognized the real and very important possibility that the program could have different effects on different types of people. For example, the program might have a strong positive impact on the employment earnings of participants with, say, relatively high levels of pre-Center education, but might not have any impacts at all on participants with low education levels. In technical parlance, this would represent a "treatment-by-education interaction." Or, the program might work quite well, having a strong, positive impact on the number of weeks white participants are employed, but because of racial discrimination in the local community, it might show no impact on the employment of nonwhites -- a "treatment-by-ethnicity interaction."

Another type of interaction, related to personal maturation, that has been hypothesized as a possibility by several reviewers of draft reports. They suggested that members of the control group may show constant gains in employment earnings from the pre-Center interview to follow-up interviews. The program participants, on the other hand, were out of the labor force for the six to ten months they were in the program and, therefore would be expected to fall behind the controls in gains in employment earnings during that period. Then, if the program were effective, program participants should show a sharper gain in employment earnings after they left the program than the controls. This hypothesis of a "personal maturation by treatment" interaction effect is illustrated by the diagram below:



If this situation were actually the case, the MRC analysis of covariance would erroneously lead us to conclude that there is no program effect on gains in employment earnings. This would happen because the estimate of the effect obtained from the MRC analysis assumes that there is no interaction (i.e., that the regression lines for participants and controls are statistically parallel), as illustrated in the diagram below:



The possibility of such interaction effects was highly important for two related reasons: first, program impacts could be "buried" and missed because they only existed for some specific subset of the families studied. Second, if such interactions exist, they could tell us much about the types of participant families for whom the program was most effective.

Therefore, a set of variables representing possible interactions of treatment status with each covariate was incorporated into the analysis of each outcome measure. If the data indicated that such effects were operating, the study participants were split (disaggregated) on the variable showing the interaction with the treatment (program) and the analysis redone. Returning to our earlier examples, if we found a treatment-by-education interaction, we divided the study participants into two groups (high education and low education) and then analyzed the two groups separately. Similarly, if there was a treatment-by-ethnicity interaction, the study participants were split into white and nonwhite, and the two groups were reanalyzed separately. Again, this protected against the possibility of missing program impacts because different effects on different people cancelled each other out when the entire data set was examined, and also made it possible to see if various subgroups of participants were more responsive to the program than others.

A NOTE ON DECIDING IF A PROGRAM EFFECT EXISTS

In the introduction to this report we pointed out that we could make two types of errors in deciding upon the existence of program effects: 1) we could wrongly arrive at the conclusion that Mountain-Plains had effects on the QOL of its participants when, in fact, it did not; or 2) we could wrongly conclude that the program had no effects when it really did. This is a dilemma faced by every researcher who must analyze a sample rather than an entire population.

Traditionally, when researchers test hypotheses (and our hypothesis is that Mountain-Plains' participants did better than their control group counterparts) they have tended to be very conservative in terms of the first type of error. That is, they have tended to try to minimize the chances of incorrectly concluding that an effect (experimental/control difference) exists when it really does not. This is done at the expense of an increased risk of committing the second type of error, and is accomplished by controlling the level of statistical significance that must be achieved before the existence of an effect is acknowledged. The traditional levels used for deciding that an effect exists are .05 or less, or .01 or less (i.e., the researcher is willing to accept only either a 5 percent or a 1 percent chance of being wrong when he concludes that an effect exists).

It is important to note that a decreased risk of being wrong when one concludes an effect does exist means an increased risk of failing to identify a real effect. The trade-off made between reducing the chances of making one or the other type of error involves a good deal of subjective judgement at best. Our personal bias is that the Mountain-Plains program should be given the benefit of the doubt, tempered somewhat by the high per family cost of operating the program. Therefore, rather than applying the stringent, traditionally used significance criteria of .05 or .01, we have required that an observed effect reach only the .20 level of significance before we acknowledge it as a real program effect. That is, we are willing to take up to a 20 percent chance of being wrong when we conclude that a program effect exists.

CHAPTER IV

THE FINDINGS OF THE EVALUATION

In this chapter we present our findings from the evaluation of the Mountain-Plains program. The discussion is organized into two major sections. In the first section we focus on Mountain-Plains' impacts on the outcome measures. In the second section we focus on the covariates, examining their relationships with the outcome measures.

MOUNTAIN-PLAINS IMPACTS ON SIX OUTCOMES

This section presents the results of our assessment of Mountain-Plains' impacts on the six QOL outcomes discussed earlier:

- Change in family monthly employment earnings
- Change in family income from welfare source
- Change in number of weeks the family was employed
- Change in the occupational prestige of the family's job
- Level of family well-being
- Level of personal well-being of the family members

We present the results of our analyses of program impacts on these six outcomes only for program completers, the group who should demonstrate the greatest program effects since they experienced the complete treatment offered by Mountain-Plains. Results are presented separately for one-parent and two-adult families because of the significant differences between these two types of families in terms of their life circumstances and the implications of these differing circumstances for potential program effects.

Table IV-1 on the following page provides a concise summary of the impacts Mountain-Plains had on the six outcomes for two-adult and one-parent families. The table presents the 95% confidence intervals about, and the level of statistical significance for, the estimates of the difference between program completers and their control groups. An examination of Table IV-1 shows that overall, of the six outcome measures, Mountain-Plains had an impact on three of them. Impacts on two of the outcomes were positive for both two-adult and one-parent families -- a reduction in family income from welfare sources, and an increase in the occupational prestige

Table IV-1

Summary of the Effects of Participating in Mountain-Plains on Six Key Outcome Measures (with 95% Confidence Intervals)

PROGRAM EFFECTS ON:	2-ADULT FAMILIES			1-PARENT FAMILIES		
	Lower Bound	Best Estimate	Upper Bound	Lower Bound	Best Estimate	Upper Bound
Change in Family Average Monthly Earnings from Employment	–$79.92	$16.42 (.74)	$112.77	–$79.89	$12.90 (.78)	$105.69
Change in Family Average Monthly Income from Welfare Sources	–$47.32	–$24.89* (.03)	–$2.46	–$119.23	–$70.90* (.004)	–$22.56
Change in Number of Weeks (6-month base) Family was Employed	–3.32	–1.01 (.39)	1.30	–4.20	–1.15 (.46)	1.90
Change in Family Average Occupational Prestige Score	2.17	8.34* (.008)	14.52	1.21	10.26* (.03)	19.31
Average Level of Family Well-Being at Follow-Up	–.76	–.44* (.007)	–.12	–2.86	–0.37 (.38)	2.12
Average Level of Personal Well-Being at Follow-Up	–.20	.29 (.24)	.77	–.24	.22 (.35)	.68

* An asterisk indicates the level of significance for the difference between the participant and control groups exceeds our criteria of .20 for deciding that a program effect exists. The numbers in parentheses provide the exact level of the statistical difference between the participant and control groups.

of the jobs held by the heads-of-household (HOH) and the spouse. On the other hand, the program had a detrimental effect on the family well-being of two-adult families (but no effect on one-parent families).

We must, however, caveat the summary statement made by Table IV-1, since we encountered several interaction effects when we conducted the basic analyses. Change in family income from welfare sources showed interaction effects for both two-adult and one-parent families. Change in number of weeks employed (which showed no overall program effect) showed an interaction effect for one-parent families, as did family well-being. When we encountered interaction effects, we re-analyzed the data for specific subgroups of subjects and obtained separate estimates of program effects for each subgroup. The results of the analyses of interactions are presented below as part of the discussion of each outcome measure.

CHANGE IN MONTHLY EARNINGS FROM EMPLOYMENT

Table IV-1 shows that the covaried estimate of Mountain-Plains' effect on gain in monthly employment earnings of two-adult families is $16.42, in favor of program completers. However, this value is significant at the .74 level, which means that we would have a 74% chance of being wrong in assuming that this difference is due to an effect of participating in Mountain-Plains, as opposed to fluctutations caused by random assignment to the participant and control groups. The 95% confidence interval about the estimate provides a context for this statement. The confidence interval shows that the real value for the estimate of program effects on monthly employment earnings ranges from a loss of $79.92 per month to a gain of $112.77 per month, clearly demonstrating we can not reasonably assume there was a larger gain in employment earnings by completers than by their control group counterparts.

Notice that the range between the lower and upper bounds of the confidence interval is quite large -- about $193 per month (or $2,316 per year). This is due to the extreme variability in changes in employment earnings shown by the study participants, which ranged from losses of as much as $742 per month to gains up to over $1,100 per month. Figure IV-1 on the following page shows a graph of the pre-Center to follow-up changes in the employment earnings of two-adult completer and control families.

Since the outcome measure is a change score, it does not provide a feeling for where the families started out and where they ended up in terms of actual dollars of employment earnings. Table IV-2 therefore presents, for two-adult completer and control families combined, a cross tabulation of pre-Center by follow-up monthly employment earnings (in 1976 dollars).

Returning to Table IV-1, we see that Mountain-Plains also had no impact on the change in employment earnings of one-parent families. While the estimate of the effect was $12.90 per month, this is significant at only the .[illegible] level and the confidence interval has about the same range as was found for two-adult families, ranging from a lower bound of

Figure IV-1
Percentage Distribution of Changes in Monthly Employment Earnings for 2-Adult Completer and Control Families

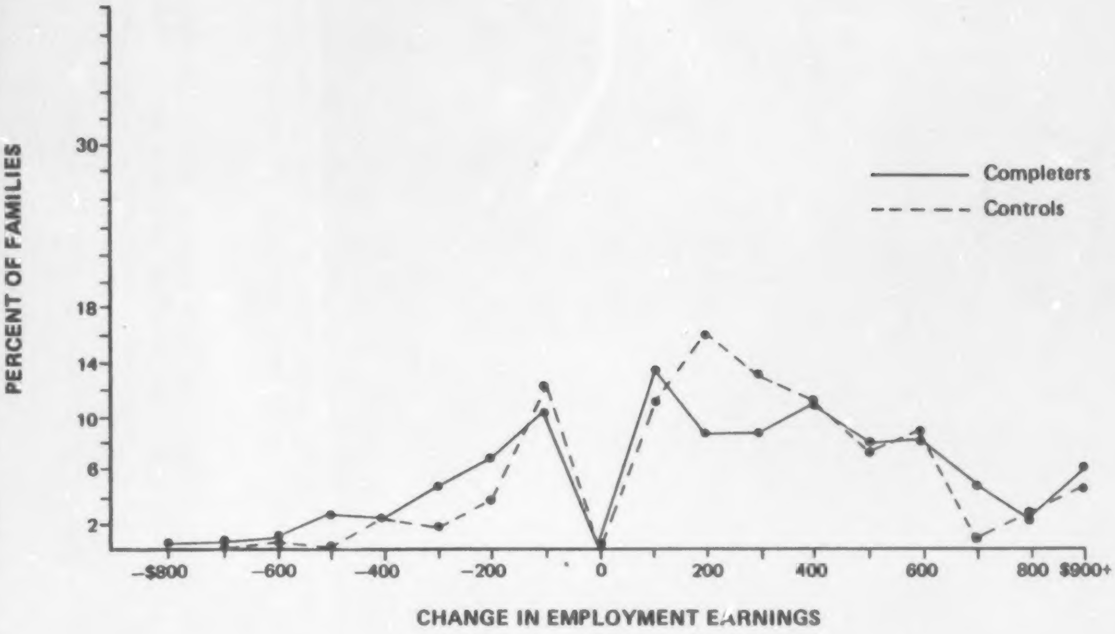


Table IV-2
Crosstabulation of Pre-Center by Follow-Up Monthly Employment Earnings for 2-Adult Completer and Control Families Combined

FOLLOW-UP EMPLOYMENT EARNINGS

PRE-CENTER EMPLOYMENT EARNINGS

Count Row Pct	$0	$1-$100	$101-$200	$201-$300	$301-$400	$401-$500	$501-$600	$601-$700	$701-$800	$801-$900	$901-$1000	$1001-$1100	$1101-$1200	$1201+	Row Total
$0	2 40.0	0 0	0 0	0 0	0 0	0 0	2 40.0	0 0	0 0	1 20.0	0 0	0 0	0 0	0 0	5 .8
$1-$100	1 5.3	2 10.5	1 5.3	3 15.8	3 15.8	0 0	5 26.3	1 5.3	0 0	1 5.3	2 10.5	0 0	0 0	0 0	19 3.1
$101-$200	1 1.6	6 9.5	5 7.9	4 6.3	5 7.9	5 7.9	8 12.7	8 12.7	3 4.8	5 7.9	3 4.8	3 4.8	1 1.6	6 9.5	63 10.3
$201-$300	4 4.6	2 2.3	7 8.0	6 6.9	7 8.0	6 6.9	15 17.2	12 13.8	11 12.6	7 8.0	5 5.7	1 1.1	0 0	4 4.6	87 14.2
$301-$400	2 1.6	2 1.6	3 2.4	7 5.7	12 9.8	17 13.8	20 16.3	11 8.9	13 10.6	12 9.8	7 5.7	5 4.1	2 1.6	10 8.1	123 20.1
$401-$500	5 4.6	3 2.8	3 2.8	7 6.4	8 7.3	13 11.9	18 16.5	11 10.1	15 13.8	13 11.9	5 4.6	4 3.7	3 2.8	1 .9	109 17.8
$501-$600	1 1.0	1 1.0	3 3.1	1 1.0	9 9.4	12 12.5	23 24.0	15 15.6	10 10.4	4 4.2	9 9.4	1 1.0	4 4.2	3 3.1	96 15.7
$601-$700	1 1.8	3 5.4	1 1.8	1 1.8	1 1.8	3 5.4	2 3.6	7 12.5	10 17.9	6 10.7	4 7.1	5 8.9	5 8.9	7 12.5	56 9.1
$701-$800	0 0	1 2.8	0 0	1 2.8	4 11.1	3 8.3	5 13.9	5 13.9	3 8.3	3 8.3	3 8.3	1 2.8	0 0	7 19.4	36 5.9
$801-$900	0 0	0 0	0 0	0 0	0 0	2 20.0	0 0	2 20.0	2 20.0	0 0	0 0	3 30.0	0 0	1 10.0	10 1.6
$901-$1000	0 0	0 0	0 0	0 0	0 0	1 14.3	0 0	0 0	0 0	1 14.3	0 0	0 0	1 14.3	4 57.1	7 1.1
$1101-$1200	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1 50.0	1 50.0	0 0	2 .3
Column Total	17 2.8	20 3.3	23 3.8	30 4.9	49 8.0	62 10.1	98 16.0	72 11.7	67 10.9	53 8.6	38 6.2	24 3.9	17 2.8	43 7.0	613 100.0

a loss of $79.89 to an upper bound of $105.69.

Again, the width of the confidence interval is explained by the great variability in the change scores exhibited by study participants, as is shown by the graph in Figure IV-2. Among one-parent families, pre-Center to follow-up changes in employment earnings ranged from a loss of $400 per month to a gain of $800 per month. Table IV-3 presents a crosstabulation of pre-Center by follow-up income for one-parent families to provide the reader with a feeling for the level of income involved for these families.

CHANGE IN INCOME FROM WELFARE

Table IV-1 shows that participation in Mountain-Plains reduced two-adult families dependence on welfare income by an average of $24.89 per month (about $300 per year), which is a statistically significant, positive program impact. The confidence interval about this estimate shows the average reduction over all two-adult families ranged from -$47.32 to -$2.46 per month. However, when we analyzed program impacts on changes in welfare income for two-adult families, we encountered significant interaction effects that led us to believe the reduction in dependence on welfare was not consistent across all two-adult families. We therefore re-analyzed program impacts on change in welfare income for specific subgroups of families. The results of these analyses to take the interactions into account are summarized in Figure IV-3.

Among two adult families, the strongest interaction was completer/control status by the years of education of the spouse. We therefore divided the two-adult families into two groups -- those in which the spouse had 12 or more years of education, and those in which she had less than 12 years of education. When we re-analyzed the data separately for these two groups of families, we found that for the families with the higher-educated spouses (about 46% of the two-adult families) the estimate of the program's effect on change in welfare income was a loss of $4.84 per month (a loss in welfare income would be a positive program effect). However, this figure was not statistically significant (significance = .71). The confidence interval again demonstrates why this is so -- the lower bound of the confidence interval was -$30.16 per month and the upper bound was an increase of $20.49 per month in welfare income.

When we attempted the re-analysis for two-adult families with spouses who had lower education, we encountered an interaction effect due to the age of the head-of-household (HOH). We therefore divided this group families into two groups, depending upon whether the HOH was 24 years or older, or younger than 24. When we re-analyzed the group with the younger HOHs (about 24% of the two-adult families) we obtained an estimated program effect on change in welfare income of -$2.42 per month, which was statistically insignificant (significance = .91). The confidence interval about this estimate ranged from -$45.17 per month to $40.32, and we conclude that Mountain-Plains had no impact on changes in welfare income for two-adult families in which the spouse had fewer than 12 years of education and the HOH was 23 years old or younger.

Figure IV-2
Percentage Distributions of Changes in Monthly Employment Earnings for 1 - Parent Completer and Control Families

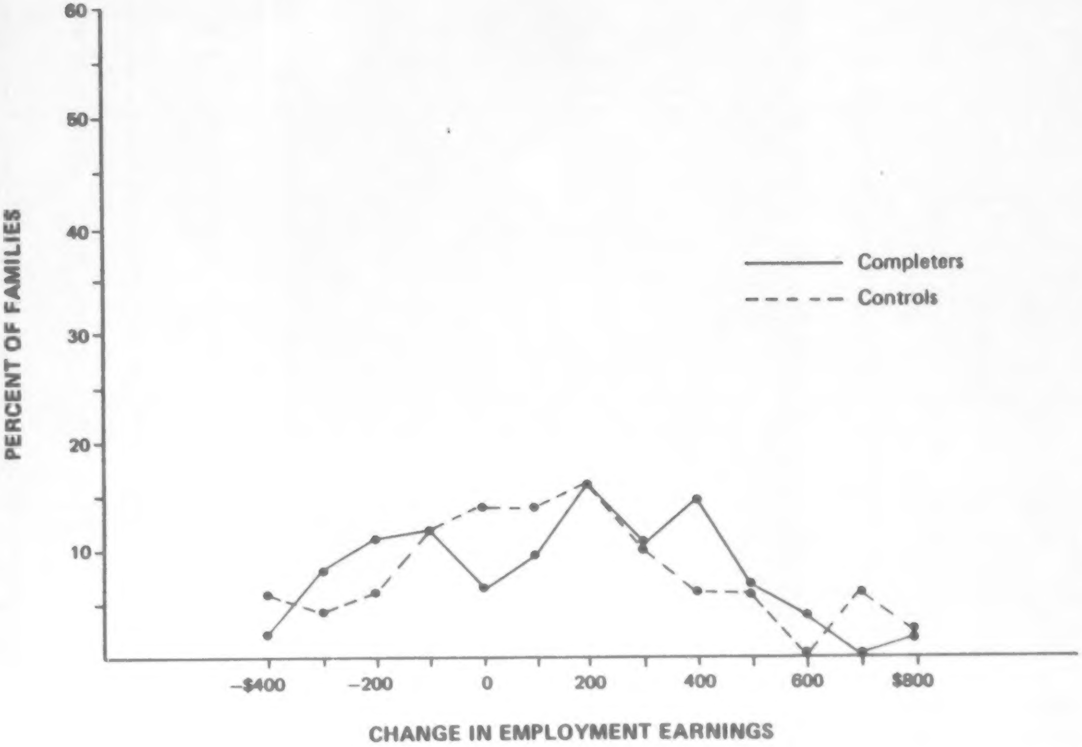


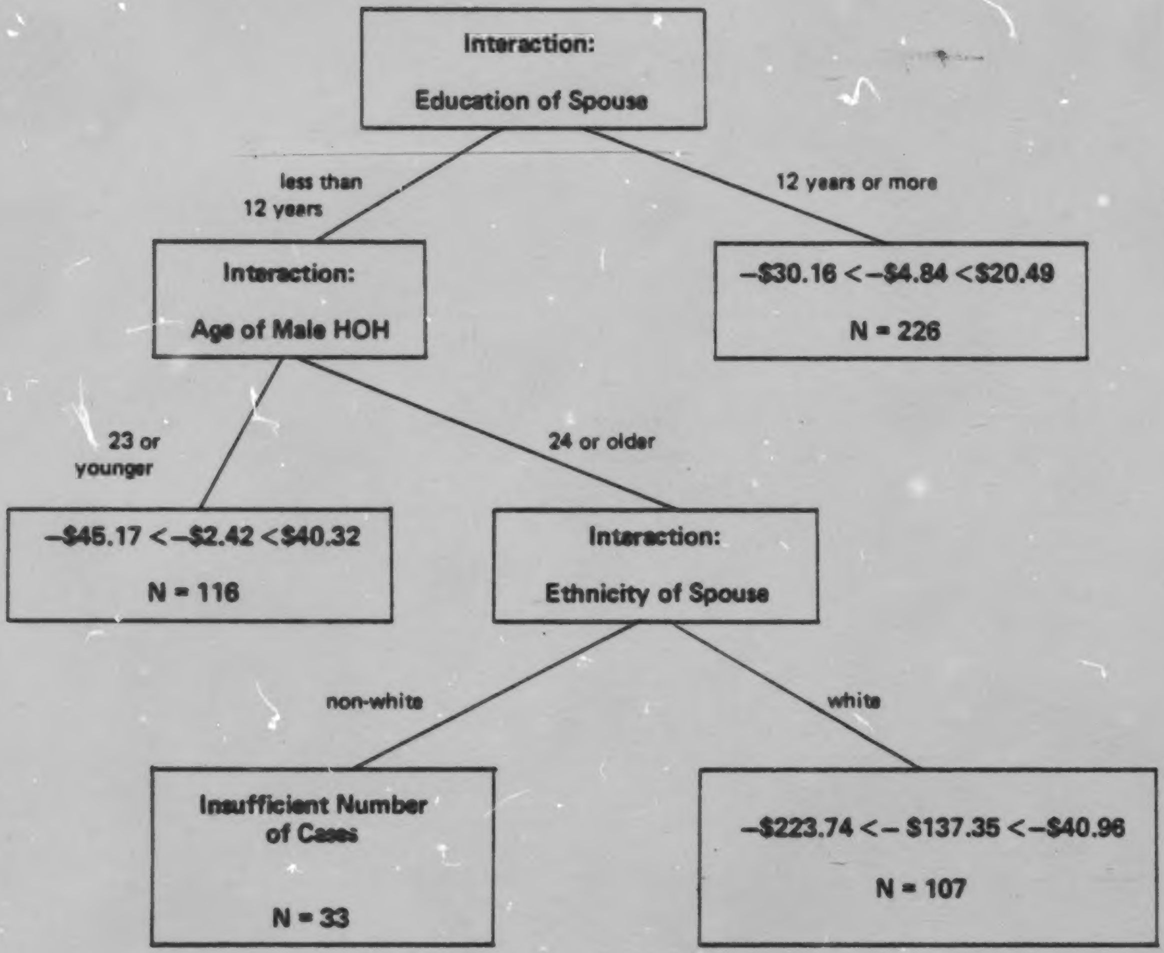
Table IV-3
Crosstabulation of Pre-Center by Follow-Up Monthly Employment Earnings for 1-Parent Completer and Control Families Combined

FOLLOW-UP EMPLOYMENT EARNINGS

PRE-CENTER EMPLOYMENT EARNINGS

Count Row Pct	$0	$1-$100	$101-$200	$201-$300	$301-$400	$401-$500	$501-$600	$601-$700	$701-$800	$801-$900	Row Total
$0	15 40.5	4 10.8	2 5.4	2 5.4	3 8.1	6 16.2	1 2.7	2 5.4	2 5.4	0 0	37 19.6
$1-$100	3 12.0	6 24.0	1 4.0	7 28.0	5 20.0	1 4.0	0 0	0 0	2 8.0	0 0	25 13.2
$101-$200	3 6.8	5 11.4	5 11.4	7 15.9	4 9.1	12 27.3	7 15.9	0 0	1 2.3	0 0	44 23.3
$201-$300	1 3.2	8 25.8	2 6.5	1 3.2	5 16.1	4 12.9	3 9.7	5 16.1	1 3.2	1 3.2	31 16.4
$301-$400	1 4.5	3 13.6	1 4.5	4 18.2	4 18.2	5 22.7	2 9.1	0 0	1 4.5	1 4.5	22 11.6
$401-$500	0 0	3 11.5	6 23.1	0 0	2 7.7	8 30.8	4 15.4	2 7.7	1 3.8	0 0	26 13.8
$501-$600	0 0	0 0	0 0	0 0	1 50.0	0 0	0 0	1 50.0	0 0	0 0	2 1.1
$601-$700	0 0	0 0	0 0	0 0	0 0	0 0	1 50.0	1 50.0	0 0	0 0	2 1.1
Column Total	23 12.2	29 15.3	17 9.0	21 11.1	24 12.7	36 19.0	18 9.5	11 5.8	8 4.2	2 1.1	189 100.0

Figure IV-3
Program Impacts on Changes in Mean Monthly Welfare Income:
Two-Adult Completer Families



When we attempted to analyze program effects on the welfare income of two-adult families in which the spouse had fewer than 12 years of education and an HOH who was 24 or older, we encountered another interaction effect, this time with the ethnicity of the spouse. We therefore further divided these families into those in which the spouse was white, and those in which the spouse was not white. There were too few cases in the not-white group to make an estimate of program effect.

Among the group with white spouses (about 22% of the two-adult families) the estimated program effect was a reduction of $137.35 per month in welfare income, a statistically significant (significance = .006), large, positive program effect that translates into about $1,648 per year. The confidence interval about this estimate ranges from a maximum reduction of $233.74 to a minimum reduction of $40.96 per month.

The results of our interaction analyses clearly show that program effects on change in income from welfare were not distributed evenly among the two-adult families who participated in the program. The program had no effect on the welfare income of about 70 percent of the two-adult families. On the other hand, there was a very large effect on the specific subgroup of two-adult families who were characterized by older husbands (24 or older) with white spouses who had less than a high school education (a subgroup comprising about 22 percent of all two-adult families.)

Figure IV-4 shows a graph of the distribution of all completer and control two-adult families on changes in welfare income. Table IV-4 shows the pre-Center by follow-up crosstabulation of welfare income for two-adult completer and control families combined.

Table IV-1 shows that participation in the Mountain-Plains program also significantly reduced the dependence on welfare of one-parent families by $70.90 per month, or about $850. per year. The confidence interval about this estimate ranges from a reduction of $119.23 per month to a reduction of $22.56 per month. As with two-adult families, however, we also encountered interaction effects in analyzing program effects on change in income from welfare among one-parent families. We therefore divided the one-parent families into appropriate subgroups to conduct interaction analyses. The results of the interaction analyses are summarized in Figure IV-5.

The first interaction we encountered was with the years of education of the female HOH, so we subdivided the one-parent families into those into which the HOH had a high school education or more, and those in which the HOH had less than a high school eduction. When we attempted to analyze the families in which the HOH had less than a high school education, we encountered another interaction, with the number of jobs the HOH had held during the year prior to receiving the pre-Center interview. We therefore further divided this group into those HOHs who had held no jobs, and those who had held one or more jobs in the year prior to receiving the pre-Center interview.

Figure IV-4
Percentage Distribution of Changes in Monthly Welfare Income
for 2-Adult Completer and Control Families

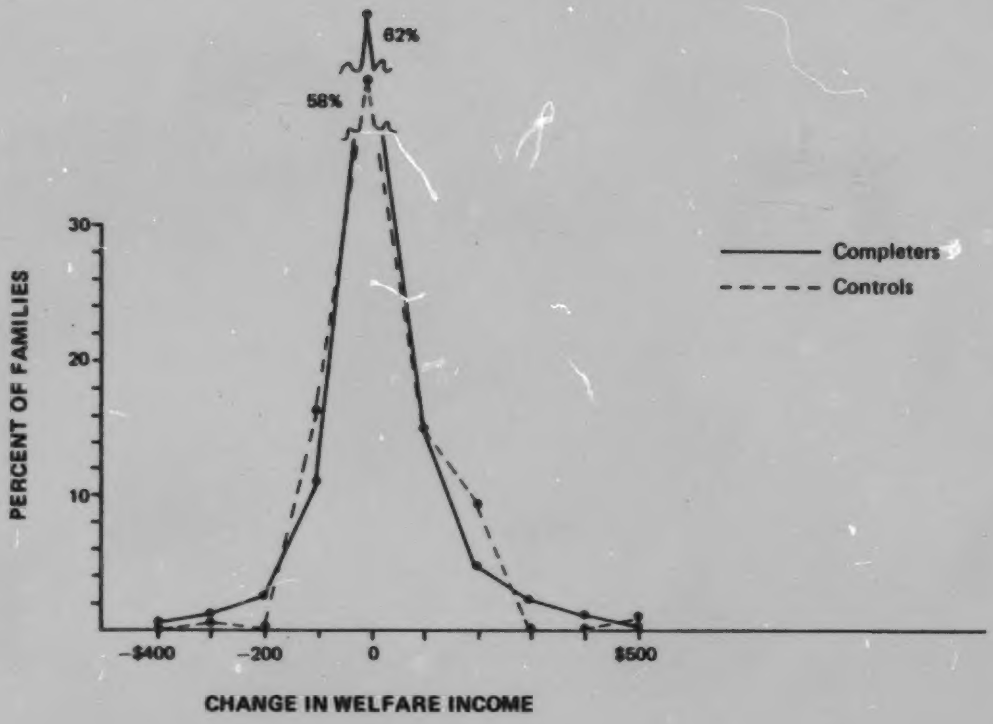
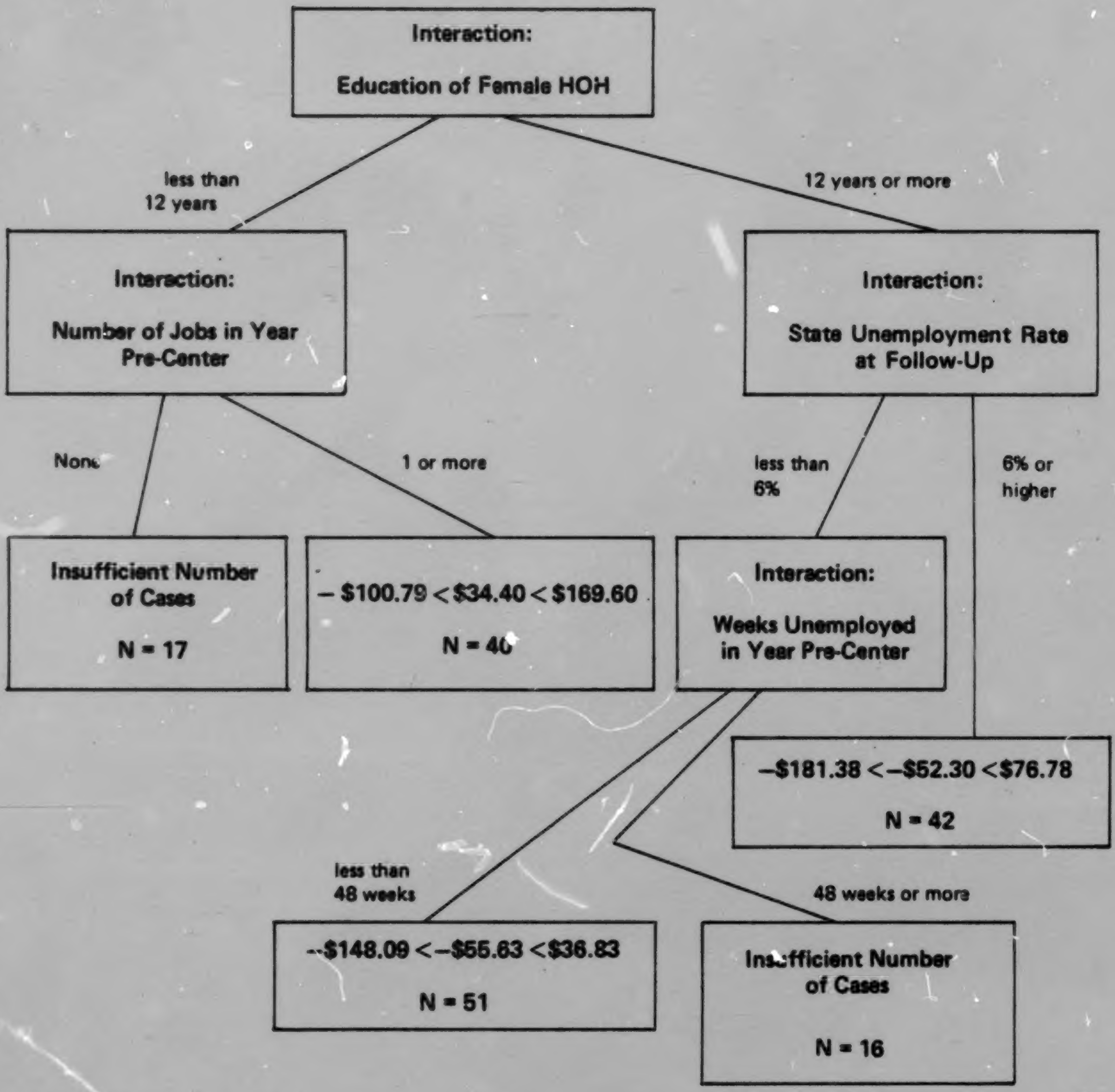


Table IV-4

Crosstabulation of Pre-Center by Follow-Up Monthly Welfare Income for 2-Adult Completer and Control Families Combined

PRE-CENTER WELFARE INCOME	FOLLOW-UP WELFARE INCOME							
Count Row Pct	$0	$1- $100	$101- $200	$201- $300	$301- $400	$401- $500	$501- $600	Row Total
$0	389 77.6	68 13.6	29 5.8	9 1.8	3 .6	3 .6	0 0	501 78.8
$1- $100	58 61.1	22 23.2	8 8.4	4 4.2	2 2.1	0 0	1 1.1	95 14.9
$101- $200	8 38.1	5 23.8	8 38.1	0 0	0 0	0 0	0 0	21 3.3
$201- $300	5 38.5	1 7.7	2 15.4	2 15.4	2 15.4	0 0	1 7.7	13 2.0
$301- $400	2 50.0	2 50.0	0 0	0 0	0 0	0 0	0 0	4 .6
$401- $500	0 0	1 50.0	1 50.0	0 0	0 0	0 0	0 0	2 .3
Column Total	462 72.6	99 15.6	48 7.5	15 2.4	7 1.1	3 .5	2 .3	636 100.0

Figure IV-5
Program Impacts on Change in Mean Monthly Welfare Income:
One-Parent (Female HOH) Completer Families



There were too few families who had HOHs with less than a high school education and who had held no jobs during the year prior to receiving the pre-Center interview to obtain an estimate of program impact for this group (about 10 percent of the one-parent families).

Among those one-parent families in which the HOH had at least a high school education and had held one or more jobs during the year prior to receiving the pre-Center interview, the estimate was that this group of families increased their income from welfare by $34.40 per month. However, this estimate was not statistically significant (significance = .61) and the confidence interval was very large, ranging from a reduction in welfare income of $100.79 to an increase of $169.60. We therefore concluded that participation in Mountain-Plains had no impact on change in income from welfare for this subgroup of one-parent families.

When we attempted to analyze program impacts on the welfare income of one-parent families in which the HOH had 12 or more years of education, we encountered another interaction, this time with the unemployment rate in the state where the respondent was living when the follow-up interview was conducted. Therefore we further divided this group of families into those who were living in states with an unemployment rate of less than 6 percent, and those who were living in states with an unemployment rate of 6 percent or more. When we attempted to analyze program effects on the families living in states with unemployment rates of less than 6 percent, we encountered yet another interaction effect, this time with the number of weeks the HOH had been unemployed during the year prior to receiving the pre-Center interview. So we further divided this subgroup into two more specific groups, depending upon whether the HOH had been unemployed for 48 or more weeks, or fewer than 48 weeks.

There were too few families to obtain an estimate of program effects on change in welfare income in the group characterized by HOHs who had been unemployed 48 weeks or more during the year before receiving the pre-Center interview.

For those families in which the HOH had been umemployed for fewer than 48 weeks, the estimated program effect was a $55.63 per month reduction in welfare income which, however, was not statistically significant (significance = .23). The confidence interval about this estimate ranges from a reduction of $148.09 per month to an increase of $36.83 per month. We therefore concluded that the program had no impact on the welfare income of this particular subgroup of one-parent families. The relatively small number of families in this group, coupled with the large width of the confidence interval, make this conclusion subject to debate.

When we analyzed the subgroup of one-parent families characterized by HOH with 12 or more years of education who were living in states with a high unemployment rate, we did not encounter an additional interaction effects. The estimate of the program's effect on the welfare income of this subgroup (about 25 percent of the one-parent families) was a reduction of $52.30 per month. This value was, however, not statistically significant (significance = .41), and the confidence interval ranged from a reduction of $181.38 per month to an increase of $76.78 per month.

Again, the number of families in this subgroup was small and the confidence interval was very wide, but we concluded the program had no effect on the welfare income for this specific subgroup of one-parent families.

The findings from our interaction analyses pose somewhat of a contradiction to the findings from our overall analyses of program effects on the welfare income of one-parent families. About 80% of the one-parent families fall into one of the three subgroups large enough to support an interaction analysis. None of these three subgroups showed a statistically significant program effect, yet we found a large, positive program effect on the total group of one-adult families. It could be that the two subgroups that were too small to support analyses of program impacts (they made up about 20 percent of the one-parent families) actually enjoyed huge reductions in welfare income that we could not observe. You will remember that a subgroup comprising some 22 percent of two-adult families accounted for the overall positive effect on reduction in welfare income we observed among all two-adult families.

Figure IV-6 provides a graph of the frequency distributions of one-parent completer and control families on pre-Center to follow-up changes in income from welfare sources. Table IV-5 gives the pre-Center by follow-up crosstabulation of welfare income.

CHANGE IN WEEKS EMPLOYED

Table IV-1 shows the estimated program impact on the number of weeks (out of six months) two-adult families were employed was a loss of 1.01 weeks. This value was, however, not statistically significant (significance = .39), and the confidence interval ranged from an estimated loss of 3.32 weeks per six months to a gain of 1.30 weeks of employment per six months. We concluded that the program had no impact on the number of weeks two-adult families were employed. This is a particularly disappointing finding, given one of Mountain-Plains' most basic goals was to get families more fully and consistently employed.

We observed no interaction effects in our analysis of changes in weeks employed by two-adult families. Figure IV-7 plots the frequency distribution of two-adult completer and control families on change in weeks employed, Table IV-6 gives the pre-Center by follow-up crosstabulation.

Table IV-1 shows an estimated loss of 1.15 weeks of employment per six months for one-parent families. As for two-adult families, this loss was not statistically significant (significance = .46), and the confidence interval was quite wide, ranging from a loss of 4.20 weeks to a gain of 1.90 weeks of employment per six months. For one-parent families, however, we encountered interaction effects and divided the families into appropriate subgroups to gain a clearer picture of what was happening. The results of the interaction analyses are presented in Figure IV-8.

Figure IV-6
Percentage Distributions of Changes in Monthly Welfare Income for 1 - Parent Completer and Control Families

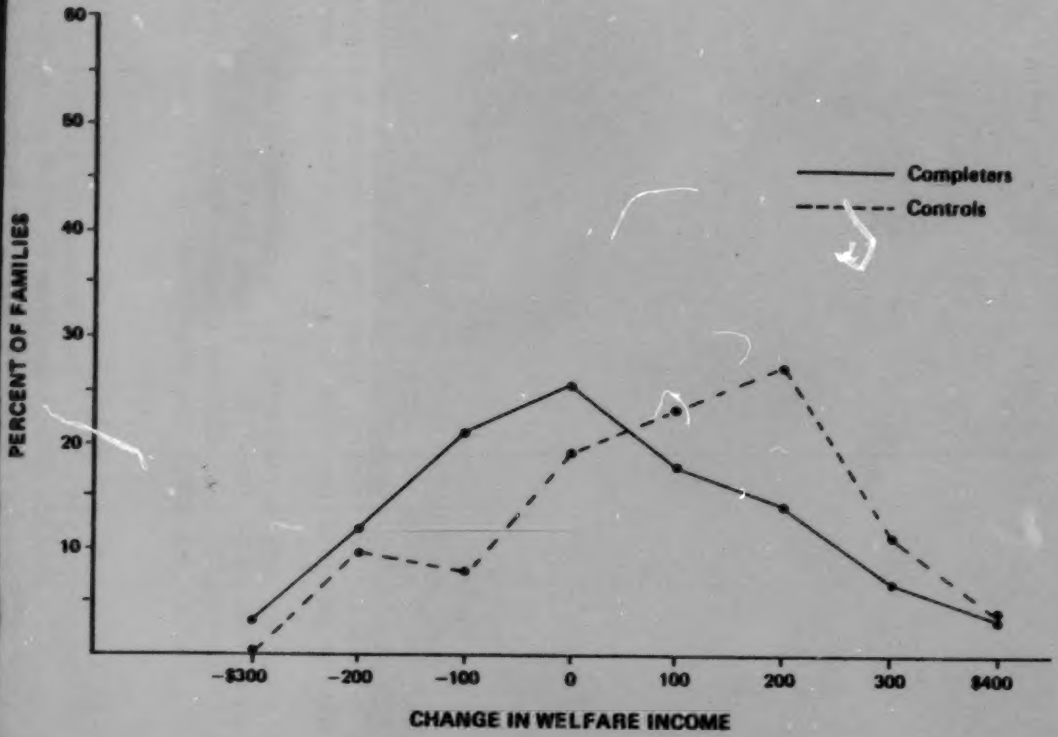


Table IV-5
Crosstabulation of Pre-Center by Follow-Up Monthly Welfare Income for 1-Parent Completer and Control Families Combined

				FOLLOW-UP WELFARE INCOME				
PRE-CENTER WELFARE INCOME	Count Row Pct	$0	$1- $100	$101- $200	$201- $300	$301- $400	$701- $800	Row Total
	$0	43 61.4	12 17.1	8 11.4	4 5.7	3 4.3	0 0	70 36.3
	$1- $100	23 31.1	14 18.9	18 24.3	10 13.5	9 12.2	0 0	74 38.3
	$101- $200	4 25.0	4 25.0	3 18.8	3 18.8	2 12.5	0 0	16 8.3
	$201- $300	11 42.3	4 15.4	3 11.5	6 23.1	2 7.7	0 0	26 13.5
	$301- $400	2 33.3	2 33.3	1 16.7	1 16.7	0 0	0 0	6 3.1
	$401- $500	0 0	0 0	0 0	0 0	0 0	1 100.0	1 .5
	Column Total	83 43.0	36 18.7	33 17.1	24 12.4	16 8.3	1 .5	193 100.0

Figure IV-7
Percent Distribution of Changes in Weeks Employed
for 2-Adult Completer and Control Families

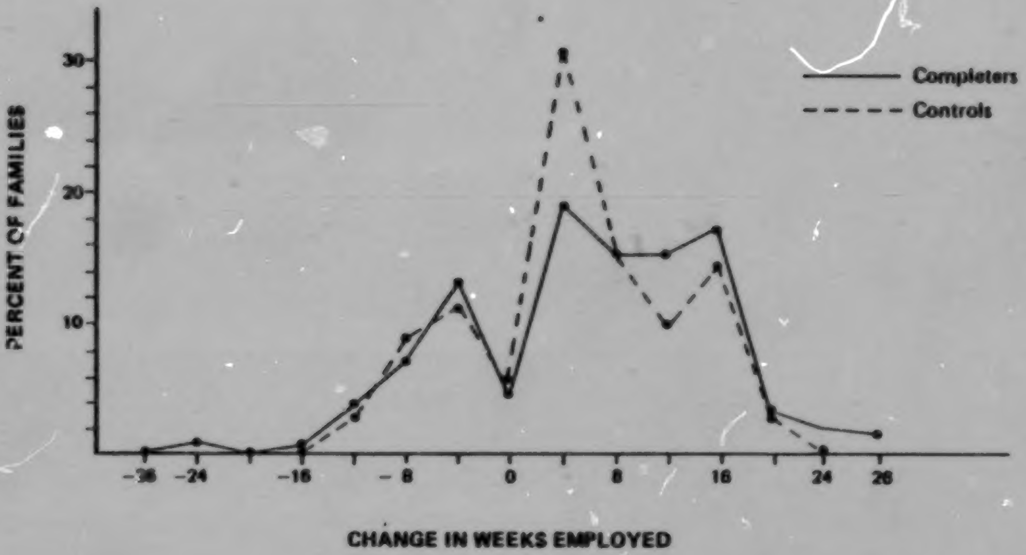
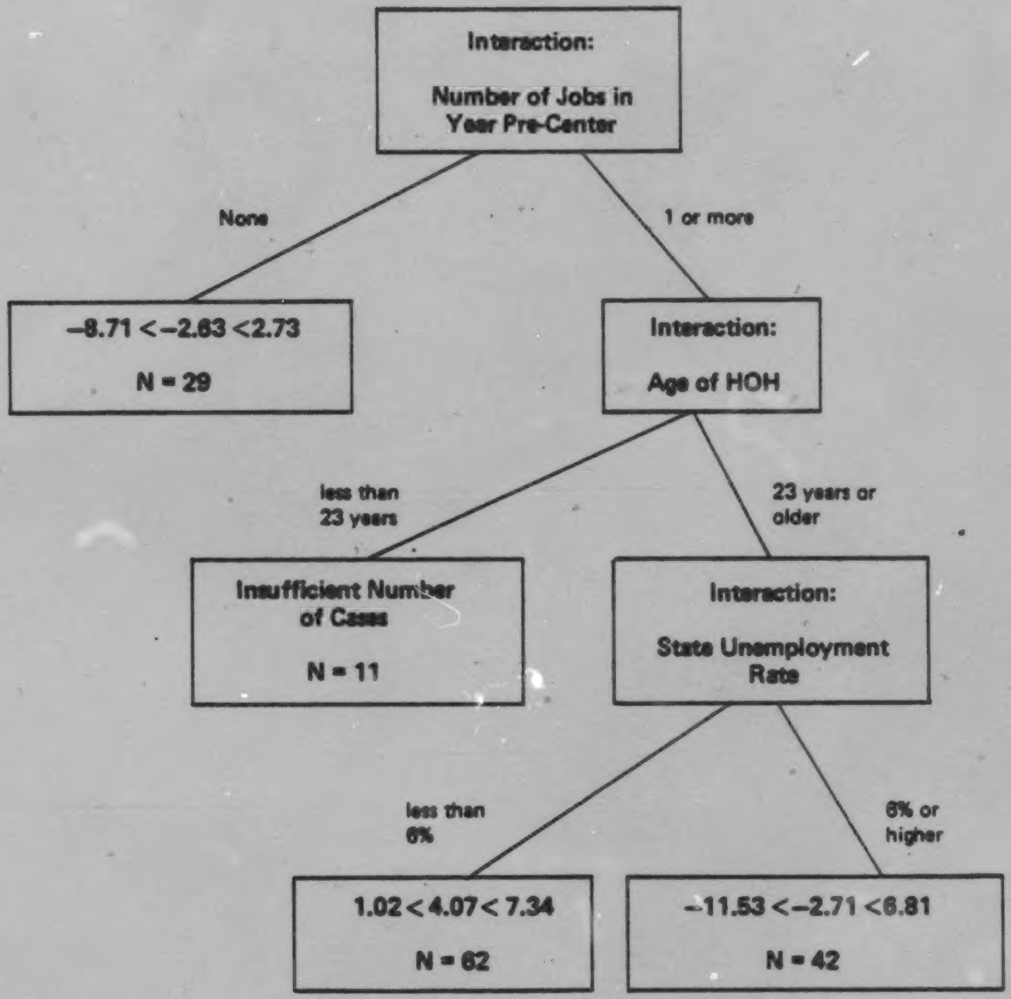


Table IV-6
Crosstabulation of Pre-Center by Follow-Up Weeks Employed for 2-Adult Completer and Control Families Combined

WEEKS (out of 6 month period) EMPLOYED AT PRE-CENTER		WEEKS (out of 6 month period) EMPLOYED AT FOLLOW-UP								
	Count Row Pct	0	1-4	5-8	9-12	13-16	17-20	21-24	25-26	Row Total
	0	1 5.6	0 0	2 11.1	3 16.7	3 16.7	3 16.7	2 11.1	4 22.2	18 4.1
	1-4	3 8.3	2 5.6	6 16.7	12 33.3	7 19.4	2 5.6	3 8.3	1 2.8	36 8.3
	5-8	0 0	4 5.2	6 7.8	25 32.5	16 20.8	7 9.1	9 11.7	10 13.0	77 17.7
	9-12	1 .5	4 2.2	9 4.9	54 29.3	29 15.8	22 12.0	28 15.2	37 20.1	184 42.4
	13-16	0 0	1 2.0	2 3.9	12 23.5	12 23.5	5 9.8	9 17.6	10 19.6	51 11.8
	17-20	0 0	1 2.7	1 2.7	8 21.6	6 16.2	6 16.2	9 24.3	6 16.2	37 8.5
	21-24	0 0	0 0	1 5.0	5 25.0	3 15.0	5 25.0	2 10.0	4 20.0	20 4.6
	25-26	0 0	0 0	0 0	0 0	1 9.1	0 0	5 45.5	5 45.5	11 2.5
	Column Total	5 1.2	12 2.8	27 6.2	119 27.4	77 17.7	50 11.5	67 15.4	77 17.7	434 100.0

Figure IV-8
Gains in Family Weeks Employed:
One-Parent (Female HOH) Completer Families



The strongest interaction effect was with the number of jobs the female HOH had held during the year prior to receiving the pre-Center interview, so we divided the families into two groups, depending upon whether the HOH had held none, or one or more jobs during that year. When we analyzed program effects on the change in number of weeks employed by those single HOHs who had held no jobs during the year prior to the pre-Center interview, we obtained an estimated program effect of a loss of 2.63 weeks of employment. This, however, was not statistically significant (significance = .55), and we concluded the program had no impact on the change in weeks employed for this subgroup of one-parent families.

When we attempted to analyze program impacts on one-parent families in which the HOH had held one or more jobs we encountered another interaction effect, this time with the age of the HOH. So we again divided this group of families into two subgroups -- HOH 23 or older, and younger than 23. There were too few families in the younger than 23 group to obtain an estimate of program effect, and when we attempted to analyze program effects for the older group, we encountered still another interaction effect, with the unemployment rate for the state in which the family was living at the time of the follow-up interview. Therefore we further divided this group on the basis of the state unemployment rate, at 6 percent and higher, and lower than 6 percent. This resulted in two subgroups with enough families in them to obtain estimates of program impacts.

For the subgroup of one-parent families characterized by HOHs who held one or more jobs during the year prior to the pre-Center interview, were 23 or older and who were living in a state with a lower (under 6 percent) unemployment rate, we found a positive program effect of 4.07 weeks per 6 month period more employment (significance = .12). The confidence interval about this estimate ranged from a low gain of 1.02 weeks to a high of 7.34 weeks per 6 month period. This subgroup comprised about 43 percent of all the one-parent families.

For the subgroup of one-parent families with the same HOH characteristics of the above subgroup, with the exception that they were living in states with unemployment rates of 6 percent or higher (about 29 percent of the one-parent families), the estimated program effect was a loss of 2.71 weeks of employment per 6 month period. This, however, was not statistically significant, and we concluded that the program had no impact on this subgroup of one-parent families.

Figure IV-9 shows a plot of the frequency distribution of all one-parent completer and control families on change in weeks employed. Table IV-7 gives the pre-Center by follow-up crosstabulation of weeks employed.

Overall, the program's effectiveness in getting families employed more weeks was quite limited, since it was restricted to an 8.2 weeks per year gain for a subset of about 10 percent of all participant families.

Figure IV - 9
Percentage Distributions of Changes in Weeks Employed
for 1 - Parent Completer and Control Families

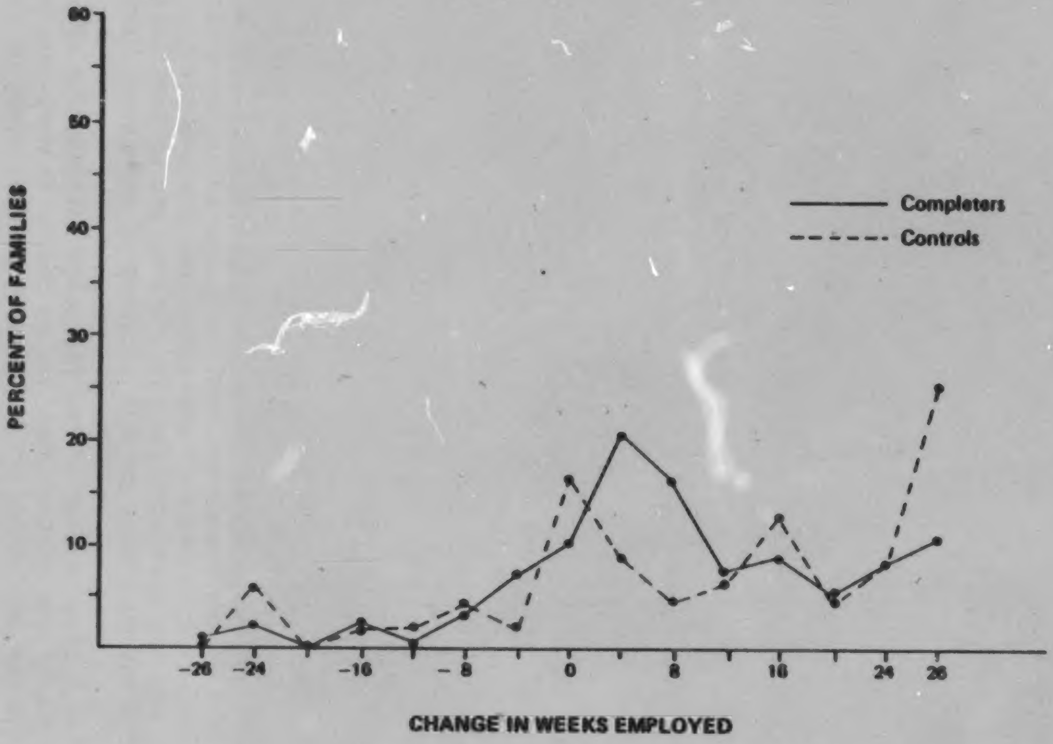


Table IV-7
Crosstabulation of Pre-Center by Follow-Up Weeks Employed for 1-Parent Completer and Control Families Combined

WEEKS (out of 6 month period) EMPLOYED AT FOLLOW-UP

WEEKS (out of 6 month period) EMPLOYED AT PRE-CENTER

Count Row Pct	0	1-4	5-8	9-12	13-16	17-20	21-24	25-26	Row Total
0	23 76.7	2 6.7	1 3.3	1 3.3	0 0	0 0	3 10.0	0 0	30 17.1
1-4	14 56.0	7 28.0	1 4.0	0 0	1 4.0	0 0	2 8.0	0 0	25 14.3
5-8	10 58.8	2 11.8	1 5.9	0 0	1 5.9	0 0	2 11.8	1 5.9	17 9.7
9-12	7 41.2	3 17.6	2 11.8	0 0	2 11.8	1 5.9	1 5.9	1 5.9	17 9.7
13-16	8 57.1	2 14.3	1 7.1	2 14.3	0 0	0 0	1 7.1	0 0	14 8.0
17-20	12 80.0	1 6.7	1 6.7	1 6.7	0 0	0 0	0 0	0 0	15 8.6
21-24	6 50.0	2 16.7	0 0	1 8.3	3 25.0	0 0	0 0	0 0	12 6.9
25-26	23 51.1	3 6.7	0 0	5 11.1	3 6.7	3 6.7	2 4.4	6 13.3	45 25.7
Column Total	103 58.9	26 12.6	7 4.0	1 5.7	10 5.7	4 2.3	11 6.3	8 4.6	175 100.0

CHANGE IN OCCUPATIONAL PRESTIGE

Completion of the Mountain-Plains program resulted in significant gains in the occupational prestige of the jobs held by both two-adult and one-parent families. Two-adult families showed an average gain of 8.34 points on the 99 point scale, with the confidence interval ranging from a low gain of 2.17 points to a high of 14.52 points. Among one-parent families the average gain in occupational prestige was estimated at 10.26 points, with the confidence interval ranging from a low gain of 1.21 points to a high of 19.31 points. No interaction effects were observed for either family type.

Figure IV-10 plots the frequency distribution of two-adult families on changes in occupational prestige, and Table IV-8 shows their pre-Center by follow-up crosstabulation by levels of occupational prestige. Figure IV-11 and Table IV-9 provide the same information for one-parent families.

LEVEL OF FAMILY WELL-BEING

You are reminded that, since we had no pre-Center measures of family well-being, program impact in this area was assessed by comparing completers and controls on their level of family well-being at followup rather than comparing them in terms of changes in family well-being.

Table IV-1 shows the estimated program impact on the family well-being of two-adult families was -.44. This was a large and statistically significant (significance = .007) negative program effect. This finding is particularly disappointing, especially given the emphasis placed on the family by Mountain-Plains. We wish we had some concrete information that would allow us to explain this perverse program effect, but we do not. One speculation on our part is that the program provided job skill training (and probably the motivation for some independence and working) to spouses who wanted it. In the strong macho culture of the Mountain-Plains region, a wife who worked and brought in money could well pose a threat to many cultural traditions and expectations, thereby disrupting satisfaction with the marital relationship.

For one-parent families, Table IV-1 shows an estimated program effect on family well-being of -.37. This was not statistically significant, and we concluded the program had no impact on the family well-being of one-parent families overall. However, we encountered several interaction effects, and we subdivided one-parent families into appropriate subgroups and conducted interaction analyses. These analyses are summarized in Figure IV-12. We found no program effect, positive or negative, on family well-being for the one subgroup of one-parent families that was large enough to analyze.

LEVEL OF PERSONAL WELL-BEING

Referring again to Table IV-1, we find that the estimates of program impact on personal well-being for two-adult and one-parent families

Figure IV - 10
Percentage Distributions of Changes in Occupational Prestige
for 2 - Adult Completer and Control Families

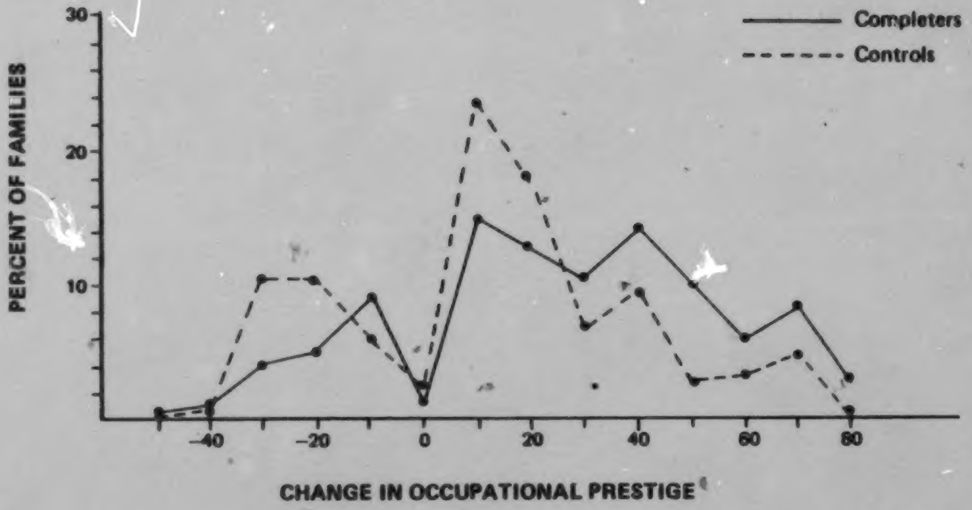


Table IV-8
Crosstabulation of Pre-Center by Follow-Up Occupational Prestige Scores for 2-Adult Completer and Control Families Combined

FOLLOW-UP OCCUPATIONAL PRESTIGE SCORES

PRE-CENTER OCCUPATIONAL PRESTIGE SCORES

Count Row Pct	0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	Row Total
0	5 7.7	11 16.9	10 15.4	12 18.5	14 21.5	7 10.8	2 3.1	4 6.2	0 0	0 0	65 15.1
1-10	10 9.4	22 20.8	12 16.0	16 15.1	12 11.3	14 13.2	10 9.4	5 4.7	0 0	0 0	106 24.7
11-20	6 4.8	11 8.7	26 20.6	37 29.4	23 18.3	18 14.3	3 2.4	1 .8	0 0	1 .8	126 29.3
21-30	1 1.6	7 10.9	9 14.1	11 17.2	14 21.9	8 12.5	11 17.2	3 4.7	0 0	0 0	64 14.9
31-40	1 2.4	1 2.4	6 14.3	8 19.0	7 16.7	12 28.6	3 7.1	2 4.8	2 4.8	0 0	42 9.8
41-50	0 0	1 4.8	3 14.3	6 28.6	6 28.6	3 14.3	1 4.8	1 4.8	0 0	0 0	21 4.9
51-60	0 0	0 0	0 0	1 25.0	1 25.0	2 50.0	0 0	0 0	0 0	0 0	4 .9
61-70	0 0	0 0	0 0	0 0	0 0	1 50.0	1 50.0	0 0	0 0	0 0	2 .5
Column Total	23 5.3	53 12.3	71 16.5	91 21.2	77 17.9	65 15.1	31 7.2	16 3.7	2 .5	1 .2	430 100.0

Figure IV - 11
Percentage Distributions of Changes in Occupational Prestige for 1 - Parent Completer and Control Families

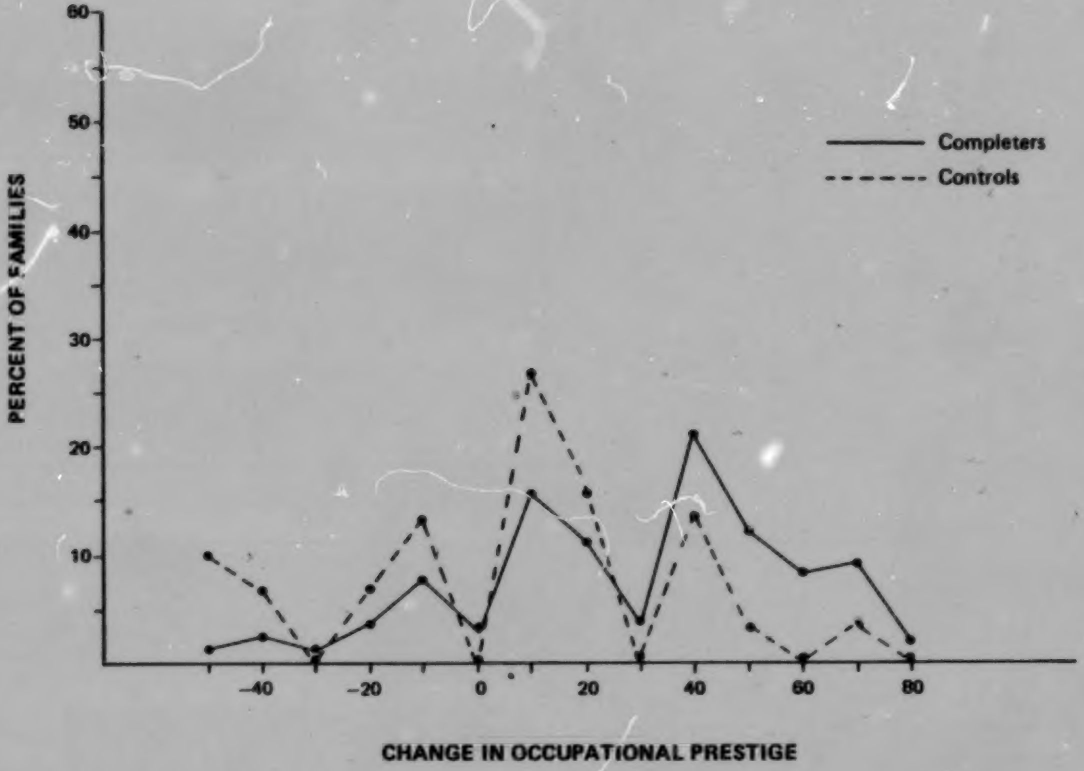


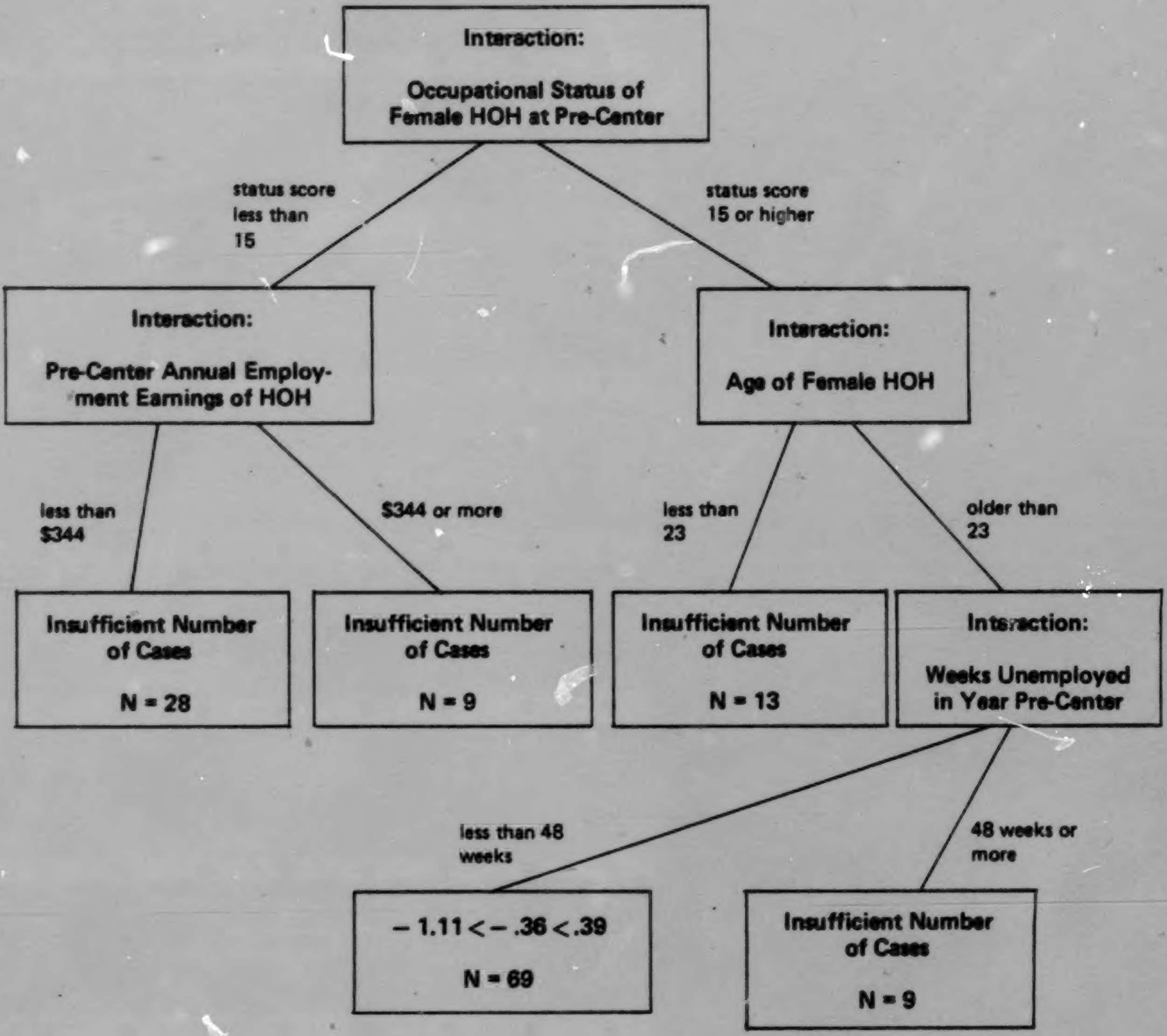
Table IV-9
Crosstabulation of Pre-Center by Follow-Up Occupational Prestige Scores for 1-Adult Completer and Control Families Combined

FOLLOW-UP OCCUPATIONAL PRESTIGE SCORES

PRE-CENTER OCCUPATIONAL PRESTIGE SCORES

Count Row Pct	0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	Row Total
0	1 4.8	3 14.3	2 9.5	3 14.3	3 14.3	1 4.8	1 4.8	5 23.8	2 9.5	0 0	21 17.4
1-10	0 0	0 0	0 0	1 11.1	1 11.1	1 11.1	2 22.2	4 44.4	0 0	0 0	9 7.4
11-20	0 0	3 9.7	8 25.8	3 9.7	2 6.5	2 6.5	7 22.6	5 16.1	0 0	1 3.2	31 25.6
21-30	0 0	1 3.7	5 18.5	5 18.5	1 3.7	2 7.4	8 29.6	2 7.4	2 7.4	1 3.7	27 22.3
31-40	0 0	0 0	0 0	0 0	0 0	2 28.6	0 0	5 71.4	0 0	0 0	7 5.8
41-50	0 0	0 0	2 25.0	0 0	1 12.5	1 12.5	1 12.5	3 37.5	0 0	0 0	8 6.6
51-60	0 0	1 8.3	3 25.0	0 0	2 16.7	0 0	1 8.3	4 33.3	1 8.3	0 0	12 9.9
61-70	0 0	0 0	0 0	0 0	0 0	1 33.3	0 0	2 66.7	0 0	0 0	3 2.5
71-80	0 0	0 0	0 0	0 0	1 33.3	2 66.7	0 0	0 0	0 0	0 0	3 2.5
Column Total	1 .8	8 6.6	20 16.5	12 9.9	11 9.1	12 9.9	20 16.5	30 24.8	5 4.1	2 1.7	121 100.0

Figure IV-12
Program Impacts on Family Well-Being:
One-Parent Completer Families


Interaction:
Occupational Status of Female HOH at Pre-Center
status score less than 15
status score 15 or higher
Interaction:
Pre-Center Annual Employment Earnings of HOH
Interaction:
Age of Female HOH
less than $344
$344 or more
less than 23
older than 23
Insufficient Number of Cases
N = 28
Insufficient Number of Cases
N = 9
Insufficient Number of Cases
N = 13
Interaction:
Weeks Unemployed in Year Pre-Center
less than 48 weeks
48 weeks or more
− 1.11 < − .36 < .39
N = 69
Insufficient Number of Cases
N = 9

were .29 and .22, respectively. Neither of these estimates was statistically significant, however, and no interaction effects were observed.

We concluded that Mountain-Plains had no impact on the personal well-being of completer families.

EXPLAINING VARIATIONS IN THE OUTCOME MEASURES:

THE COVARIATE SET RECONSIDERED

In the preceding sections of this chapter we noted mixed program impacts on the six outcome measures we examined for two-adult and one-parent families. Out of the twelve possible overall effects, Mountain-Plains had a positive impact on four of them (a reduction in income from welfare and an increase in occupational prestige for both two-adult and one-parent families), and a negative impact on the family well-being of two-adult families. No measurable program impact was observed on the remaining seven possibilities. This leaves us to wonder: What role does the covariate set play in explaining variations in the outcomes for two-adult and one-parent families?

To generate possible answers to this question, we reexamined the variables in the covariate set to see how they were related to the outcome measures addressed in this report. In Figure IV-13 we provide a summary of this reexamination by presenting the direction of each statistically significant (i.e., $p < .10$) relationship between variables in the covariate set and the outcome measures, prior to any data disaggregation. The reader should note that since all the variables in the covariate set, plus time out of the program and the program participation indicator were all in the equations, each of these relationships is a "partial" -- i.e., with the effects of all other predictors statistically removed.

An examination of Figure IV-13 reveals several important patterns worthy of further discussion, to which we now turn.

- The outcome measures are different from each other.

This apparently simple-minded statement is actually of considerable importance. It is prompted by the fact that the several male HOH and spouse covariates show very different patterns of relationships to the different outcomes. This difference between outcomes is particularly important in view of the lack of evidence of program impact, because it indicates that the outcomes provide a number of truly different -- as opposed to overlapping -- areas in which the program could have shown impacts. Additional support for the contention that the outcome measures we used are different from each other comes from Table IV-10, which gives the correlation matrices among the outcomes for two-adult and one-parent families. The only high intercorrelation among the outcomes is between change in employment earnings and change in weeks employed ($r = .58$) for two adult families. Even in this case, where we would expect a very high intercorrelation, these two outcomes only account for 33 percent of the variance in each other.

Figure IV - 13

Direction of Significant ($p < .16$) Relationships Between Pre-Center Variables and Outcomes for Two-Adult and One-Adult Families

	TWO-ADULT FAMILIES						ONE-ADULT FAMILIES					
	Gains in Employment Earnings	Change in Mean Monthly Welfare Income	Gains in No. of Weeks Employed	Gains in Occupational Status	Family Well-Being	Personal Well-Being	Gains in Employment Earnings	Change in Mean Monthly Welfare Income	Gains in No. of Weeks Employed	Gains in Occupational Status	Family Well-Being	Personal Well-Being
Male HOH:												
Ethnicity	+		+									
Employed at TOI	+	−										
No. of Jobs in Year Pre-Center						−						
Occupational Status				+								
Education				+								
Age												
Pre-Center Employment Earnings	−			+	+							
No. of Weeks Unemployed in Year Pre-Center			+	+								
Spouse (Woman of House):												
Ethnicity												
Employed at TOI			+								+	
No. of Jobs in Year Pre-Center		+							−			
Occupational Status								+		−		
Education	+	−				+	+		+		−	+
Age			+				+					
Pre-Center Employment Earnings											+	
No. of Weeks Unemployed in Year Pre-Center	+		+						+		+	
Other:												
Pre-Center Family Size		+	+		+		−					
State Unemployment Rate		+	+	+					+	+	+	
Time Out of Program	+	+	+			−	+					

Table IV-10

Correlation Matrix of Outcome Measures for Two-Adult and One-Parent Families*

	Change in Employment Earnings	Change in Welfare Income	Change in Weeks Employed	Change in Occupational Prestige	Level of Family Well-Being	Level of Personal Well-Being
Change in Employment Earnings	–	–.29 (–.40)	.58 (.40)	.23 (.16)	.17 (–.05)	.06 (.06)
Change in Welfare Income		–	–.20 (–.19)	–.06 (–.12)	–.03 (.06)	–.01 (.03)
Change in Weeks Employed			–	.29 (.17)	.13 (–.02)	–.07 (.11)
Change in Occupational Prestige				–	.06 (.07)	.05 (.13)
Level of Family Well-Being					–	.28 (.38)
Level of Personal Well-Being						–

---

* Correlation coefficients for one-parent families are in parentheses.

- Two-adult families are different from one-adult families.

From very early in the conduct of the Follow-Up Study, we have maintained that important qualitative differences between two-adult and one-adult families warranted separate analyses of the two groups. The empirical evidence in support of this contention lies in the different patterns of relationships between the covariates representing the woman of the house (the spouse in a two-adult family) and the outcome measures when we consider two-adult and one-adult families.

- Family well-being seems unrelated to most covariates when we examine two-adult families, but is significantly related to five covariates among one-adult families.

Regardless of program impact, it appears that family well-being in two-adult families may be more closely tied to interpersonal dynamics between HOH and spouse than to individual personal characteristics. In one-adult families, this personal interaction is lacking, responsibilities may weigh more heavily on the woman of the house, and such job-related factors as earnings and unemployment are more relevant as predictors of family well-being.

- Personal well-being at the time of follow-up is not strongly tied to pre-Center characteristics.

This may simply be due to the variety of personal experiences of the adults during the many months between pre-Center and follow-up interviews. It must be remembered that these are basically poor people, usually living under equally poor conditions, which may overpower other possible influences on personal/emotional well-being.

- Although there is very little consistency in the patterns of covariate relationships to these six outcome measures, several variables in the covariate set showed significant relationships with multiple outcomes.

In particular, pre-Center employment earnings of the male head of two-adult families proved to be a useful predictor of gains in employment earnings, gains in occupational status, and family well-being. In the case of gains in employment earnings, the relationship is negative -- i.e., lower pre-Center earnings are associated with greater gains in earnings. This may suggest a ceiling effect operating on the earnings of people in the relatively low-status jobs held by our sample members, producing a tendency for relatively low or high-income people in the group to move closer to the group mean if they move at all. It is also indicative of a great deal of economic and employment instability in the lives of the families in this study.

This hypothesis is supported by the fact that the male HOH's reported number of weeks unemployed at the pre-Center interview was positively related to both gains in weeks employed and gains in occupational status. That is, the higher the HOH's unemployment pre-Center, the larger his gains in both number of weeks employed and in occupational status.

The education of the woman of the house, whether she was a spouse or single female HOH, was also an important predictor of outcome measures, particularly if she was a single female HOH. In both, two-adult and one-parent families, her education was positively related to gains in employment earnings and personal well-being, as one might expect, and was also positively related to gains both in number of weeks employed and occupational status.

The woman's education level also showed interesting significant negative relationships with some outcomes. In two-adult families, it was negatively related to changes in mean monthly welfare income, suggesting that families with more highly educated spouses become less dependent on public support. In one-parent families the woman's education was negatively related to family well-being, possibly because more highly educated women are more fully employed, reducing the amount of time available for family-oriented activities.

Pre-Center family size, among two-adult families, was positively related to changes in welfare income and gains in weeks employed, suggesting that a large family increases both dependence on welfare and motivation to work. Surprisingly, the size of two-adult families also showed a positive relationship with family well-being, perhaps due to increased family interaction.

Among one-adult families, size was negatively related to gains in employment earnings, probably due to the mother's need to remain at home with young children and infants. (It should be recalled that these adults tended to be in their early twenties.)

The state unemployment rate was positively related to gains in weeks employed and gains in occupational status among one - and two-adult families. Among two-adult families it was also positively related to increases in mean monthly welfare income, as one might expect. Among one-parent families, the unemployment rate was also positively related to family well-being, perhaps because higher unemployment rates keep mothers (who would otherwise be working) at home with their children.

Finally, time out of the program showed significant positive relationships with gains in employment earnings of both two-adult and one-parent families, and with gains in number of weeks employed among two-adult families, supporting our earlier contention that there might be an important personal maturation effect, operating among the young adults in our study. Two-adult families also showed a positive relationship between time out of the program and changes in mean monthly welfare income, suggesting that the personal maturation may include increased willingness/ability to make use of public support or that family size also increases with time out of program, increasing the need for public support.

CHAPTER V

SUMMARY AND CONCLUSIONS

This report is the result of a summative evaluation of the Mountain-Plains program's attempt to deal with a very tough issue -- the problem of rehabilitating disadvantaged families by providing them with the training and skills that would enable them to become economically and socially productive, self-sufficient members of society. The difficulty of this task is attested to by the notable lack of success in achieving similar goals demonstrated by the several federal manpower training programs sponsored under the Manpower Development Training Act of 1962 and the Comprehensive Employment Training Act of 1973.

Mountain-Plains' comprehensive approach to the problem, however, had more intuitive appeal than the more "piecemeal" approaches of most other programs. The Mountain-Plains approach explicitly recognized the importance of the role of the family as a unit in providing hindrance or support for family members in the labor force. The Mountain-Plains approach also recognized that disadvantaged families are held back by a set of interrelated educational, personal, familial and job skill problems which, in combination, constitute a formidable barrier to successful participation in the labor force. Therefore the program provided to its participants, in a family-oriented residential training center setting, a broad array of training and services intended to deal simultaneously with the full set of problems.

As a result of the wide range of training and services it provided to its participants, Mountain-Plains had numerous outcome objectives in several areas of its participants' lives. We organized these outcome objectives within a "quality of life" (QOL) paradigm comprised of five broad domains of participants' well-being (economic, work, social, familial, and personal), with each domain encompassing multiple, specific outcome objectives. During the course of this evaluation we used a variety of statistical techniques to analyze the impacts of Mountain-Plains on the quality of its participants' lives in terms of a wide range of measures. In addition to the numerous outcomes we examined, we assessed program impacts on all participants as a group, and then divided all participants into two groups and re-analyzed program effects on: (1) completers -- those who completed their full curriculum and were certified by Mountain-Plains; and (2) non-completers -- those who, for whatever reason, left the program before achieving certification by Mountain-Plains.

This report has distilled the numerous analyses we conducted in the past into an assessment of Mountain-Plains effectiveness in terms of six measures that represented the most central outcome objectives of the program. We further abbreviated the assessment by analyzing program effects only for program completers (whom we would expect to show the greatest impact since they received the program's full treatment), and by presenting all results for entire families rather than separately for husbands and wives. The results of these analyses, which are summarized below, reflect our findings from the full range of analyses that had been conducted in the past. In summary, we found the following:

OUTCOME OBJECTIVE 1: INCREASE EMPLOYMENT EARNINGS

Findings:

- The program had no effect (either positive or negative) on the employment earnings of two-adult or one-parent families.

OUTCOME OBJECTIVE 2: REDUCE INCOME FROM WELFARE SOURCES

Findings:

- Participation in Mountain-Plains resulted in an average decrease in income from welfare sources of nearly $300 per year among two-adult families.

  Upon inspection of interaction effects we found that the reduction in welfare income was unique to a specific subset of two-adult families who were characterized by heads younger than 24 who had white spouses with less than a high school education. For this particular subset of 22 percent of two-adult families, participation in Mountain-Plains resulted in a reduction in welfare income of nearly $1,650 per year. There was no program impact on the welfare income of the other families.

- Among one-parent (female-headed) families, participation in the Mountain-Plains program resulted in an average reduction in income from welfare sources of approximately $850 per year.

OUTCOME OBJECTIVE 3: INCREASE NUMBER OF WEEKS EMPLOYED

Findings:

- Participation in Mountain-Plains had no impact on the number of weeks husbands and wives in two-adult families were employed.
- There was no program impact on the number of weeks employed by one-parent families, when averaged across all families.

When we examined interaction effects, however, we found that a specific subset (43 percent) of one-parent families showed an increase of approximately 8 weeks per year in time spent employed. These were one-parent families in which the head was 23 or older, had held one or more jobs in the year prior to entering the program, and who were living in states with high unemployment rates (6 percent or higher).

OUTCOME OBJECTIVE 4: INCREASE OCCUPATIONAL PRESTIGE

Findings:

- Participation in Mountain-Plains increased the occupational prestige of two-adult completer families by an average of 8.34 points on a 100 point scale.
- One-parent families enjoyed an average increase of 10.26 points on the occupational prestige scale.
- Despite the positive gains in occupational prestige enjoyed by program completers, slightly over 73 percent of the participants ranked in the lower 40 points of the scale when measured at follow-up.

OUTCOME OBJECTIVE 5: ENHANCE FAMILY WELL-BEING

Findings:

- Two-adult completer families showed significantly lower family well-being scores at follow-up than did their comparison group.
- There was no program impact on the family well-being of one-parent families.

OUTCOME OBJECTIVE 6: ENHANCE PERSONAL WELL-BEING

Findings:

- Participation in the Mountain-Plains program had no impact on the personal well-being of either two-adult or one-parent completer families.

CONCLUSIONS

The results of our analyses of the success of the Mountain-Plains program in enhancing the quality of the lives of program completers are mixed. On one hand, the program had moderate success with two-adult families in terms of reducing dependence on welfare, and somewhat greater success in the same area with one-parent families. The reduction in dependence on welfare, however, was not complemented by a corresponding increase in employment earnings. Mountain-Plains also enjoyed a moderate success in terms of raising the average occupational prestige of the jobs held by both two-adult and one-parent families. This gain in occupational prestige probably translates into somewhat improved working conditions for program completers, although nearly three-quarters of them still were working in jobs ranked in the lowest 40 points on the prestige scale.

On the other hand, completing the Mountain-Plains program had an apparent detrimental effect on the well-being of two-adult families as family units -- an unexpected and disappointing finding in view of the emphasis the program placed on enhancing the well-being and functioning of families as units.

Beyond this mix of positive and negative effects, Mountain-Plains simply had no discernible impacts on other key outcomes: increases in employment earnings, weeks employed or personal well-being. The lack of positive program impacts on these key outcomes also is disappointing, both because of the appeal of the concept behind the program and because of the large amount of resources Mountain-Plains devoted to its attempt to improve the conditions of its participants' lives. In 1976, Mountain-Plains' average cost for a family to complete the program was $19,228. Viewed from a different perspective, it cost Mountain-Plains an average of $12,054 for each participating adult who completed all of the program, including job training.

When we view the results of our assessment of Mountain-Plains' accomplishments within the context of the costs to operate the program we conclude that, on the basis of the benefits that accrued to participants, there is no justification for continuing to support Mountain-Plains. On the average, no economic benefits accrued to participants who completed the program, and the value of the moderate gains in occupational prestige must be traded off against the damage done to the well-being of two-adult family units. The fact that program completers did not enjoy increased earnings from employment or gains in the amount of time they were employed also must be taken into account.

From a societal perspective, the amount of the reduction in income participants received from welfare sources would take over 20 years to pay back the cost of putting a family through the program, and this assumes that the reductions in participants' welfare receipts that we observed during their first three years out of the program would remain constant over the entire 20 year period.

APPENDIX III-A

EXAMINING AND PARTITIONING THE CONTROL GROUP TO ACHIEVE APPROPRIATE COMPARISON GROUPS FOR ASSESSING PROGRAM IMPACTS

EXAMINING AND PARTITIONING THE CONTROL GROUP TO ACHIEVE APPROPRIATE COMPARISON GROUPS FOR ASSESSING PROGRAM IMPACTS

1.0 BACKGROUND AND SUMMARY OF THE PROBLEM: COMPARING PARTICIPANTS AND CONTROLS

In order to best determine whether or not the Mountain-Plains program (treatment) had an effect on the participants (experimentals), it was necessary to have data from nonparticipants (controls) available for purposes of comparison.

The control group of nonparticipants should be as similar to the participants as possible in order to try to rule out the possibility that the observed differences in outcomes were the result of pre-existing differences between the two groups rather than the result of the treatment. Ideally, the two groups should be "exchangeable"* with respect to all factors relevant to the outcome measures so that any differences in outcomes not attributable to chance could reasonably be attributed to the program. It is only in the case of pure exchangeability that a test of the null hypothesis of no difference in outcomes is truly a test of no treatment effect. In all other cases the situation is more or less confounded.

In the first working paper (The Telephone Book)** we found that although a few significant differences between the participant and control families did appear, for the most part, the 58 pre-Center variables we examined showed the two groups to be fairly similar. These comparisons are presented in Tables 2F.1-1 through 2F.1-8. The seven characteristics on which significant group differences did appear were:

1) The proportion of single female heads of families.
2) The computed total family earnings from employment for the year prior to the pre-Center interview.
3) The monthly earnings of the family head from his current or most recent job at the time of the pre-Center interview.

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*The concept of exchangeability was introduced by Bruno de Finetti. See Encyclopedia of Social Sciences (1968) Vol. 12, P. 501.

**"An Initial Exploration of Analysis Procedures and Problems Related to the Evaluation of Mountain-Plains Program Impacts in the Family Domain."

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL DEMOGRAPHIC VARIABLES AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(Significance)
SEX, HEAD OF FAMILY					
Male	732	80.1	114	71.2	5.84
Female	182	19.9	46	28.7	
Missing Item	0	0.0	0	0.0	(0.0157)
OVERALL	914	100.0	160	100.0	
SEX, SPOUSE					
Male	4	0.6	0	0.0	0.00
Female	722	99.4	111	100.0	
Missing Item	0	0.0	0	0.0	(0.9641)
OVERALL	726	100.0	111	100.0	
RACE OF HEAD OF FAMILY					
White	727	79.5	130	81.3	4.45
Indian	130	14.2	26	16.2	
Mexican-American	47	5.1	3	1.9	(0.3489)
Black	5	0.5	0	0.0	
Other	5	0.5	1	0.6	
Missing Item	0	0.0	0	0.0	
OVERALL	914	100.0	160	100.0	
RACE OF SPOUSE					
White	582	80.2	83	74.8	4.66
Indian	97	13.4	23	20.7	
Mexican-American	40	5.5	4	3.6	(0.1985)
Black	0	0.0	0	0.0	
Other	7	1.0	1	0.9	
Missing Item	0	0.0	0	0.0	
OVERALL	726	100.0	111	100.0	
MARITAL STATUS					
Married	731	80.0	111	69.4	10.13
Single	32	3.5	11	6.9	
Widowed	7	0.8	2	1.2	(0.0383)
Divorced	124	13.6	30	18.8	
Separated	20	2.2	6	3.7	
Missing Item	0	0.0	0	0.0	
OVERALL	914	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL DEMOGRAPHIC VARIABLES AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(Significance)
DISABILITY OF HEAD					
Yes	61	6.7	13	8.1	0.25
No	853	93.3	147	91.9	
Missing Item	0	0.0	0	0.0	(0.6176)
OVERALL	914	100.0	160	100.0	
DISABILITY OF SPOUSE					
Yes	15	2.1	1	0.9	0.22
No	710	97.9	110	99.1	
Missing Item	0	0.0	0	0.0	(0.6423)
OVERALL	725	100.0	111	100.0	
PREVIOUS VOC. ED., HEAD					
Yes	260	28.4	48	30.0	0.31
No	619	67.7	105	65.6	
Missing Item	35	3.8	7	4.4	(0.8576)
OVERALL	914	100.0	160	100.0	
PREVIOUS VOC. ED., SPOUSE					
Yes	108	14.9	18	16.2	0.15
No	576	79.3	87	78.4	
Missing Item	42	5.8	6	5.4	(0.9276)
OVERALL	726	100.0	111	100.0	
STATE OF ORIGIN					
Idaho	157	17.2	24	15.0	1.47
Montana	152	16.6	27	16.9	
Nebraska	150	16.4	27	16.9	(0.9168)
North Dakota	137	15.0	29	18.1	
South Dakota	143	15.6	25	15.6	
Wyoming	175	19.1	28	17.5	
Missing Item	0	0.0	0	0.0	
OVERALL	914	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON DEMOGRAPHIC VARIABLES AND HOUSING CHARACTERISTICS AT PRE-CENTER*

	PARTICIPANT (Families:n= 914) (Spouses :n= 726)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
EDUCATION, HEAD OF FAMILY (highest grade completed)	10.68 (1.70)	914 (0)	10.78 (1.64)	160 (0)	0.47 (0.4947)
EDUCATION, SPOUSE (highest grade completed)	10.72 (1.78)	726 (0)	10.54 (1.48)	111 (0)	0.98 (0.3219)
AGE IN YEARS,HEAD OF FAMILY	26.58 (6.96)	914 (0)	27.21 (6.98)	160 (0)	1.12 (0.2912)
AGE IN YEARS, SPOUSE	23.48 (5.75)	726 (0)	23.87 (5.92)	111 (0)	0.44 (0.5059)
NUMBER OF CHILDREN	1.76 (1.41)	914 (0)	1.81 (1.25)	160 (0)	0.18 (0.6735)
NUMBER IN HOUSEHOLD	3.56 (1.45)	914 (0)	3.51 (1.33)	160 (0)	0.21 (0.6472)
NUMBER OF ROOMS	4.31 (1.67)	797 (117)	4.36 (1.71)	135 (25)	0.08 (0.7764)
PEOPLE PER ROOM	1.35 (0.65)	797 (117)	1.39 (0.71)	135 (25)	0.30 (0.5836)
NUMBER OF CITIES LIVED IN IN LAST FIVE YEARS	2.32 (1.38)	782 (132)	2.12 (1.25)	118 (42)	2.18 (0.1401)
NUMBER OF STATES LIVED IN IN LAST FIVE YEARS	1.61 (0.87)	812 (102)	1.54 (0.74)	134 (26)	0.95 (0.3300)
GROSS RENT (rent plus utilities)	82.60 (56.66)	791 (123)	79.04 (55.74)	136 (24)	0.46 (0.4975)
GROSS RENT AS % OF TOTAL INCOME	0.41 (0.79)	725 (189)	0.51 (0.97)	113 (47)	1.44 (0.2303)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL HOUSING CHARACTERISTICS AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(significance)
HOUSING STATUS					
Own	78	8.5	21	13.1	4.77
Rent	636	69.6	108	67.5	
Live With Others	192	21.0	31	19.4	(0.1891)
Missing Item	8	0.9	0	0.0	
OVERALL	914	100.0	160	100.0	
FLUSH TOILET					
Yes	841	92.0	153	95.6	2.79
No	44	4.8	5	3.1	
Missing Item	29	3.2	2	1.2	(0.2481)
OVERALL	914	100.0	160	100.0	
TELEPHONE					
Yes	465	50.9	76	47.5	1.80
No	434	47.5	83	51.9	
Missing Item	15	1.6	1	0.6	(0.4071)
OVERALL	914	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL EMPLOYMENT CHARACTERISTICS OF HEAD OF FAMILY AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(significance)
PRESENTLY EMPLOYED					
Yes	387	42.3	72	45.0	0.29
No	527	57.7	88	55.0	
Missing Item	0	0.0	0	0.0	(0.5889)
OVERALL	914	100.0	160	100.0	
LOOKING FOR WORK					
Yes	428	46.8	70	43.8	0.63
No	443	48.5	83	51.9	
Missing Item	43	4.7	7	4.4	(0.7289)
OVERALL	914	100.0	160	100.0	
EMPLOYMENT STATUS most recent job					
Full-time	679	77.0	111	72.1	1.95
Part-time	106	12.0	24	15.6	
Missing Item	97	11.0	19	12.3	(0.3766)
OVERALL	882	100.0	154	100.0	
INDUSTRY CODE most recent job					
Agriculture, Forestry and Fisheries	86	9.8	14	9.1	8.41
Mining	21	2.4	3	1.9	
Construction	145	16.4	29	18.8	(0.9063)
Manufacturing	155	17.6	24	15.6	
Transportation, Communications and Public Utilities	44	5.0	7	4.5	
Wholesaie, Retail Trade	146	16.6	34	22.1	
Finance, Insurance and Real Estate	7	0.8	1	0.6	
Business and Repair Services	46	5.2	8	5.2	
Personal Services	36	4.1	9	5.8	
Entertainment, Recreation	7	0.8	1	0.6	
Professional Services	61	6.9	7	4.5	
Public Administration	39	4.4	8	5.2	
Military	7	0.8	1	0.6	
Other	18	2.0	1	0.6	
Student in School	8	0.9	1	0.6	
Missing Item	56	6.3	6	3.9	
OVERALL	882	100.0	154	100.0	

* For each variable, data reported are based on all applicable cases on analytic file.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL EMPLOYMENT CHARACTERISTICS OF SPOUSE AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(significance)
PRESENTLY EMPLOYED					
Yes	149	20.5	17	15.3	1.33
No	577	79.5	94	84.7	
Missing Item	0	0.0	0	0.0	0.2486
OVERALL	726	100.0	111	100.0	
LOOKING FOR WORK					
Yes	118	16.3	18	16.2	0.32
No	544	74.9	85	76.6	
Missing Item	64	8.8	8	7.2	0.8503
OVERALL	726	100.0	111	100.0	
EMPLOYMENT STATUS most recent job					
Full-time	273	56.6	28	40.6	6.28
Part-time	97	20.1	19	27.5	
Missing Item	112	23.2	22	31.9	0.0433
OVERALL	482	100.0	69	100.0	
INDUSTRY CODE most recent job					
Agriculture, Forestry and Fisheries	11	2.3	0	0.0	19.53
Mining	3	0.6	0	0.0	
Construction	26	5.4	11	15.9	0.1905
Manufacturing	42	8.7	3	4.3	
Transportation, Communications and Public Utilities	5	1.0	1	1.4	
Wholesale, Retail Trade	169	35.1	29	42.0	
Finance, Insurance and Real Estate	7	1.5	0	0.0	
Business and Repair Services	7	1.5	1	1.4	
Personal Services	62	12.9	6	8.7	
Entertainment, Recreation	12	2.5	1	1.4	
Professional Services	67	13.9	6	8.7	
Public Administration	26	5.4	3	4.3	
Military	2	0.4	0	0.0	
Other	10	2.1	1	1.4	
Student in School	1	0.2	0	0.0	
Missing Item	31	6.4	7	10.1	
OVERALL	481	100.0	69	100.0	

* For each variable, data reported are based on all applicable cases on analytic file.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON EMPLOYMENT CHARACTERISTICS OF HEAD OF FAMILY AND SPOUSE AT PRE-CENTER*

	PARTICIPANT (Families:n= 914) (Spouses :n= 726)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
HEAD OF HOUSEHOLD					
NUMBER OF WEEKS UNEMPLOYED LAST YEAR	20.14 16.92	910 4	22.06 16.96	160 0	1.76 (0.1855)
NUMBER OF JOBS IN LAST YEAR	2.06 1.32	810 104	2.03 1.39	140 20	0.08 (0.7783)
EMPLOYMENT INCOME IN LAST YEAR	3058.99 2192.98	759 155	2696.83 1961.47	133 27	3.18 (0.0748)
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR	298.15 681.49	810 104	305.66 549.01	140 20	0.02 (0.9016)
OCCUPATIONAL STATUS most recent job (Part.n= 868,Control n= 153)	26.54 19.34	833 35	26.92 19.93	143 10	0.05 (0.8261)
MONTHLY EARNINGS most recent job (Part.n= 873,Control n= 154)	410.43 188.99	833 40	364.16 162.15	147 7	7.80 (0.0053)
SPOUSE					
NUMBER OF WEEKS UNEMPLOYED LAST YEAR	39.57 17.19	709 18	43.42 14.62	106 5	4.78 (0.0291)
NUMBER OF JOBS IN LAST YEAR	0.78 0.94	653 74	0.63 0.89	96 15	2.25 (0.1344)
EMPLOYMENT INCOME IN LAST YEAR	766.05 1221.65	634 92	535.09 1023.64	95 16	3.07 (0.0801)
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR	136.44 443.31	652 74	91.02 323.87	96 15	0.93 (0.3342)
OCCUPATIONAL STATUS most recent job (Part.n= 478,Control n= 69)	29.06 17.52	454 24	26.18 15.03	61 8	1.49 (0.2221)
MONTHLY EARNINGS most recent job (Part.n= 480,Control n= 69)	279.48 99.75	441 39	248.87 97.68	61 8	5.07 (0.0248)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON FAMILY INCOME VARIABLES AT PRE-CENTER*

	PARTICIPANT (Families:n= 914) (Spouses :n= 726)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
TOTAL FAMILY INCOME FROM EMPLOYMENT IN LAST YEAR (reported)	3069.89 2120.94	899 15	2845.25 1957.86	157 3	1.53 (0.2160)
EMPLOYMENT INCOME OF HEAD AND SPOUSE IN LAST YEAR (computed)	3601.47 2535.80	699 215	3082.43 2284.71	120 40	4.41 (0.0360)
TOTAL FAMILY INCOME FROM WELFARE IN LAST YEAR	439.32 882.39	835 79	478.40 838.05	131 29	0.23 (0.6353)
TOTAL FAMILY INCOME FROM OTHER SOURCES IN LAST YEAR	185.79 712.05	859 55	186.19 675.72	143 17	0.00 (0.9951)
TOTAL FAMILY INCOME IN LAST YEAR	3765.80 2163.01	807 107	3494.60 1900.30	125 35	1.75 (0.1856)
TOTAL FAMILY INCOME PER PERSON	1169.96 766.09	806 108	1095.32 650.91	125 35	1.07 (0.3020)
GROSS DEBTS PAYABLE IN NEXT YEAR (reported)	612.65 738.77	847 63	617.23 957.62	155 5	0.00 (0.9461)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-1

PARTICIPANT-CONTROL GROUP DIFFERENCES ON CATEGORICAL FINANCIAL AND SOCIAL VARIABLES AT PRE-CENTER*

	PARTICIPANT		CONTROL		CHI SQUARE
	n	%	n	%	(significance)
DOES FAMILY USE FOOD STAMPS					
Yes	387	42.3	60	37.5	1.35
No	436	47.7	82	51.2	
Missing Item	91	10.0	18	11.2	0.5100
OVERALL	914	100.0	160	100.0	
DOES FAMILY USE A BUDGET					
Yes	399	43.7	58	36.2	5.47
No	487	53.3	100	62.5	
Missing Item	28	3.1	2	1.2	0.0648
OVERALL	914	100.0	160	100.0	
DOES FAMILY HAVE A SAVINGS ACCOUNT					
No	682	74.6	129	80.6	8.97
Yes, Amount Increased	73	8.0	9	5.6	
Yes, Amount Decreased	78	8.5	17	10.6	0.0620
Yes, Amount Constant	54	5.9	5	3.1	
Missing Item	27	3.0	0	0.0	
OVERALL	914	100.0	160	100.0	
DOES FAMILY SHARE RECREATION ACTIVITIES					
Yes	784	85.8	137	85.6	0.74
No	96	10.5	15	9.4	
Missing Item	34	3.7	8	5.0	0.6912
OVERALL	914	100.0	160	100.0	
IS THERE A FAMILY DOCTOR					
Yes	636	69.6	101	63.1	2.82
No	260	28.4	56	35.0	
Missing Item	18	2.0	3	1.9	0.2439
OVERALL	914	100.0	160	100.0	
DOES FAMILY PARTICIPATE IN COMMUNITY					
Yes	185	20.2	11	6.9	36.41
No	280	30.6	30	18.8	
Missing Item	449	49.1	119	74.4	0.0000
OVERALL	914	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

4) The monthly earnings of spouses from their current or most recent job at the time of the pre-Center interview.

5) The number of weeks spouses were unemployed during the year prior to the pre-Center interview.

6) Whether spouses who had worked held full or part-time employment on their current or most recent jobs at the time of the pre-Center interview.

In general, these differences were incorporated into subsequent analyses by performing separate analyses and/or the use of relevant covariates.

For substantive reasons it was desirable to dintinguish between those participants who received the full treatment (the completers) and those who only received a partial treatment (the non-completers). When this distinction was used to rerun the pre-Center comparisons separately for completers and non-completers, however, it became apparent that the control group could not reasonably be considered to be representative of either of those participant subgroups.

Thirty-three of the 58 completer/non-completer/control comparisons given in Tables 2F.1-9 through 2F.1-16 yielded differences which were statistically significant at the .05 level. These results clearly pointed out that the three groups were substantially different from each other in terms of numerous salient characteristics.

In order to arrive at comparison groups for an analysis of the completers and for a separate analysis of the non-completers, we split the control group into two portions which serve as completer control group and a separate non-completer control group. Below we discuss a method for accomplishing this and present the results of our procedure.

The theoretical justification for this procedure is given in the next section. The general approach is to select as "completer-control" families those control families who are most likely to have completed the program as estimated by the maximum likelihood methods described in Section 3 below. Similarly, those who are estimated as being most likely to resign are assigned to the "non-completer control" group. Some control

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL DEMOGRAPHIC VARIABLES AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE (Significance)
	n	%	n	%	n	%	
SEX, HEAD OF FAMILY							
Male	494	78.8	238	82.9	114	71.2	8.38
Female	133	21.2	49	17.1	46	28.7	
Missing Item	0	0.0	0	0.0	0	0.0	(0.0152)
OVERALL	627	100.0	287	100.0	160	100.0	
SEX, SPOUSE							
Male	4	0.8	0	0.0	0	0.0	2.83
Female	487	99.2	235	100.0	111	100.0	
Missing Item	0	0.0	0	0.0	0	0.0	(0.2426)
OVERALL	491	100.0	235	100.0	111	100.0	
RACE OF HEAD OF FAMILY							
White	534	85.2	193	67.2	130	81.3	51.94
Indian	56	8.9	74	25.8	26	16.2	
Mexican-American	30	4.8	17	5.9	3	1.9	(0.0000)
Black	4	0.6	1	0.3	0	0.0	
Other	3	0.5	2	0.7	1	0.6	
Missing Item	0	0.0	0	0.0	0	0.0	
OVERALL	627	100.0	287	100.0	160	100.0	
RACE OF SPOUSE							
White	420	85.5	162	68.9	83	74.8	42.42
Indian	39	7.9	58	24.7	23	20.7	
Mexican-American	26	5.3	14	6.0	4	3.6	(0.0000)
Black	0	0.0	0	0.0	0	0.0	
Other	6	1.2	1	0.4	1	0.9	
Missing Item	0	0.0	0	0.0	0	0.0	
OVERALL	491	100.0	235	100.0	111	100.0	
MARITAL STATUS							
Married	495	78.9	236	82.2	111	69.4	23.36
Single	16	2.6	16	5.6	11	6.9	
Widowed	3	0.5	4	1.4	2	1.2	(0.0029)
Divorced	96	15.3	28	9.8	30	18.8	
Separated	17	2.7	3	1.0	6	3.7	
Missing Item	0	0.0	0	0.0	0	0.0	
OVERALL	627	100.0	287	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL DEMOGRAPHIC VARIABLES AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE
	n	%	n	%	n	%	(Significance)
DISABILITY OF HEAD							
Yes	32	5.1	29	10.1	13	8.1	8.12
No	595	94.9	258	89.9	147	91.9	
Missing Item	0	0.0	0	0.0	0	0.0	(0.0172)
OVERALL	627	100.0	287	100.0	160	100.0	
DISABILITY OF SPOUSE							
Yes	8	1.6	7	3.0	1	0.9	2.23
No	482	98.4	228	97.0	110	99.1	
Missing Item	0	0.0	0	0.0	0	0.0	(0.3275)
OVERALL	490	100.0	235	100.0	111	100.0	
PREVIOUS VOC. ED., HEAD							
Yes	185	29.5	75	26.1	48	30.0	1.65
No	417	66.5	202	70.4	105	65.6	
Missing Item	25	4.0	10	3.5	7	4.4	(0.7990)
OVERALL	627	100.0	287	100.0	160	100.0	
PREVIOUS VOC. ED., SPOUSE							
Yes	82	16.7	26	11.1	18	16.2	4.17
No	382	77.8	194	82.6	87	78.4	
Missing Item	27	5.5	15	6.4	6	5.4	(0.3829)
OVERALL	491	100.0	235	100.0	111	100.0	
STATE OF ORIGIN							
Idaho	107	17.1	50	17.4	24	15.0	12.11
Montana	102	16.3	50	17.4	27	16.9	
Nebraska	104	16.6	46	16.0	27	16.9	(0.2775)
North Dakota	109	17.4	28	9.8	29	18.1	
South Dakota	95	15.2	48	16.7	25	15.6	
Wyoming	110	17.5	65	22.6	28	17.5	
Missing Item	0	0.0	0	0.0	0	0.0	
OVERALL	627	100.0	287	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON DEMOGRAPHIC VARIABLES AND HOUSING CHARACTERISTICS AT PRE-CENTER*

	COMPLETER (Families:n= 627) (Spouses :n= 491)		RESIGNEE (Families:n= 287) (Spouses :n= 235)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
EDUCATION, HEAD OF FAMILY (highest grade completed)	10.92 1.60	627 0	10.14 1.77	287 0	10.78 1.64	160 0	22.53 (0.0000)
EDUCATION, SPOUSE (highest grade completed)	10.86 1.73	491 0	10.41 1.84	235 0	10.54 1.48	111 0	5.85 (0.0030)
AGE IN YEARS,HEAD OF FAMILY	27.06 6.95	627 0	25.54 6.88	287 0	27.21 6.98	160 0	5.27 (0.0053)
AGE IN YEARS, SPOUSE	24.04 5.91	491 0	22.30 5.20	235 0	23.87 5.92	111 0	7.55 (0.0006)
NUMBER OF CHILDREN	1.82 1.43	627 0	1.62 1.37	287 0	1.81 1.25	160 0	2.09 (0.1243)
NUMBER IN HOUSEHOLD	3.61 1.47	627 0	3.46 1.41	287 0	3.51 1.33	160 0	1.11 (0.3309)
NUMBER OF ROOMS	4.42 1.63	546 81	4.08 1.75	251 36	4.36 1.71	135 25	3.55 (0.0293)
PEOPLE PER ROOM	1.36 0.59	546 81	1.33 0.75	251 36	1.39 0.71	135 25	0.36 (0.6975)
NUMBER OF CITIES LIVED IN IN LAST FIVE YEARS	2.30 1.36	555 72	2.35 1.42	227 60	2.12 1.25	118 42	1.17 (0.3104)
NUMBER OF STATES LIVED IN IN LAST FIVE YEARS	1.60 0.85	568 59	1.66 0.91	244 43	1.54 0.74	134 26	0.97 (0.3792)
GROSS RENT (rent plus utilities)	88.77 52.85	547 80	68.76 62.31	244 43	79.04 55.74	136 24	11.04 (0.0000)
GROSS RENT AS % OF TOTAL INCOME	0.43 0.83	510 117	0.37 0.68	215 72	0.51 0.97	113 47	1.19 (0.3038)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL HOUSING CHARACTERISTICS AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE
	n	%	n	%	n	%	(significance)
HOUSING STATUS							
Own	60	9.6	18	6.3	21	13.1	36.70
Rent	462	73.7	174	60.6	108	67.5	
Live With Others	100	15.9	92	32.1	31	19.4	(0.0000)
Missing Item	5	0.8	3	1.0	0	0.0	
OVERALL	627	100.0	287	100.0	160	100.0	
FLUSH TOILET							
Yes	589	93.9	252	87.8	153	95.6	14.45
No	21	3.3	23	8.0	5	3.1	
Missing Item	17	2.7	12	4.2	2	1.2	(0.0060)
OVERALL	627	100.0	287	100.0	160	100.0	
TELEPHONE							
Yes	348	55.5	117	40.8	76	47.5	18.96
No	270	43.1	164	57.1	83	51.9	
Missing Item	9	1.4	6	2.1	1	0.6	(0.0008)
OVERALL	627	100.0	287	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL EMPLOYMENT CHARACTERISTICS OF HEAD OF FAMILY AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE
	n	%	n	%	n	%	(significance)
PRESENTLY EMPLOYED							
Yes	284	45.3	103	35.9	72	45.0	7.51
No	343	54.7	184	64.1	88	55.0	
Missing Item	0	0.0	0	0.0	0	0.0	(0.0234)
OVERALL	627	100.0	287	100.0	160	100.0	
LOOKING FOR WORK							
Yes	276	44.0	152	53.0	70	43.8	21.49
No	331	52.8	112	39.0	83	51.9	
Missing Item	20	3.2	23	8.0	7	4.4	(0.0003)
OVERALL	627	100.0	287	100.0	160	100.0	
EMPLOYMENT STATUS most recent job							
Full-time	484	79.9	195	70.7	111	72.1	11.88
Part-time	67	11.1	39	14.1	24	15.6	
Missing Item	55	9.1	42	15.2	19	12.3	(0.0183)
OVERALL	606	100.0	276	100.0	154	100.0	
INDUSTRY CODE most recent job							
Agriculture, Forestry and Fisheries	66	10.9	20	7.2	14	9.1	29.53
Mining	14	2.3	7	2.5	3	1.9	
Construction	99	16.3	46	16.7	29	18.8	(0.4897)
Manufacturing	104	17.2	51	18.5	24	15.6	
Transportation, Communications and Public Utilities	29	4.8	15	5.4	7	4.5	
Wholesale, Retail Trade	110	18.2	36	13.0	34	22.1	
Finance, Insurance and Real Estate	7	1.2	0	0.0	1	0.6	
Business and Repair Services	35	5.8	11	4.0	8	5.2	
Personal Services	22	3.6	14	5.1	9	5.8	
Entertainment, Recreation	3	0.5	4	1.4	1	0.6	
Professional Services	43	7.1	18	6.5	7	4.5	
Public Administration	23	3.8	16	5.8	8	5.2	
Military	4	0.7	3	1.1	1	0.6	
Other	10	1.7	8	2.9	1	0.6	
Student in School	5	0.8	3	1.1	1	0.6	
Missing Item	32	5.3	24	8.7	6	3.9	
OVERALL	606	100.0	276	100.0	154	100.0	

* For each variable, data reported are based on all applicable cases on analytic file.

Table IIIA-2

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON EMPLOYMENT CHARACTERISTICS OF HEAD OF FAMILY AND SPOUSE AT PRE-CENTER*

	COMPLETER (Families:n= 627) (Spouses :n= 491)		RESIGNEE (Families:n= 287) (Spouses :n= 235)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
HEAD OF HOUSEHOLD							
NUMBER OF WEEKS UNEMPLOYED LAST YEAR	18.25 16.91	625 2	24.27 16.24	285 2	22.06 16.96	160 0	13.57 (0.0000)
NUMBER OF JOBS IN LAST YEAR	2.02 1.31	564 63	2.16 1.35	246 41	2.03 1.39	140 20	0.95 (0.3883)
EMPLOYMENT INCOME IN LAST YEAR	3318.37 2269.98	534 93	2443.38 1863.28	225 62	2696.83 1961.47	133 27	15.00 (0.0000)
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR	344.16 775.00	564 63	192.65 370.53	246 41	305.66 549.01	140 20	4.51 (0.0113)
OCCUPATIONAL STATUS most recent job (Comp.n= 597,Res. n= 271)	27.95 20.08	575 22	23.40 17.21	258 13	26.92 19.93	143 10	4.95 (0.0072)
MONTHLY EARNINGS most recent job (Comp.n= 601,Res. n= 272)	418.05 196.26	578 23	393.14 170.49	255 17	364.16 162.15	147 7	5.51 (0.0042)
SPOUSE							
NUMBER OF WEEKS UNEMPLOYED LAST YEAR	38.58 18.17	482 10	41.69 14.69	227 8	43.42 14.62	106 5	5.04 (0.0067)
NUMBER OF JOBS IN LAST YEAR	0.77 0.93	447 44	0.81 0.94	205 30	0.63 0.89	96 15	1.38 (0.2523)
EMPLOYMENT INCOME IN LAST YEAR	812.77 1285.15	434 57	664.65 1066.99	200 35	535.09 1023.64	95 16	2.59 (0.0760)
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR	120.43 289.05	447 44	171.35 665.35	205 30	91.02 323.87	96 15	1.45 (0.2342)
OCCUPATIONAL STATUS most recent job (Comp.n= 318,Res. n= 160)	28.63 17.15	303 15	29.90 18.26	151 9	26.18 15.03	61 8	1.02 (0.3619)
MONTHLY EARNINGS most recent job (Comp.n= 320,Res. n= 160)	279.21 100.14	294 26	280.01 99.31	147 13	248.87 97.68	61 8	2.53 (0.0804)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL EMPLOYMENT CHARACTERISTICS OF SPOUSE AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE
	n	%	n	%	n	%	(significance)
PRESENTLY EMPLOYED							
Yes	112	22.8	37	15.7	17	15.3	6.63
No	379	77.2	198	84.3	94	84.7	
Missing Item	0	0.0	0	0.0	0	0.0	(0.0363)
OVERALL	491	100.0	235	100.0	111	100.0	
LOOKING FOR WORK							
Yes	73	14.9	45	19.1	18	16.2	7.66
No	382	77.8	162	68.9	85	76.6	
Missing Item	36	7.3	28	11.9	8	7.2	(0.1049)
OVERALL	491	100.0	235	100.0	111	100.0	
EMPLOYMENT STATUS most recent job							
Full-time	183	57.0	90	55.9	28	40.6	9.26
Part-time	70	21.8	27	16.8	19	27.5	
Missing Item	68	21.2	44	27.3	22	31.9	(0.0549)
OVERALL	321	100.0	161	100.0	69	100.0	
INDUSTRY CODE most recent job							
Agriculture, Forestry and Fisheries	10	3.1	1	0.6	0	0.0	42.57
Mining	3	0.9	0	0.0	0	0.0	
Construction	23	7.2	3	1.9	11	15.9	(0.0640)
Manufacturing	26	8.1	16	9.9	3	4.3	
Transportation, Communications and Public Utilities	3	0.9	2	1.2	1	1.4	
Wholesale, Retail Trade	114	35.6	55	34.2	29	42.0	
Finance, Insurance and Real Estate	3	0.9	4	2.5	0	0.0	
Business and Repair Services	6	1.9	1	0.6	1	1.4	
Personal Services	36	11.2	26	16.1	6	8.7	
Entertainment, Recreation	5	1.6	7	4.3	1	1.4	
Professional Services	46	14.4	21	13.0	6	8.7	
Public Administration	16	5.0	10	6.2	3	4.3	
Military	2	0.6	0	0.0	0	0.0	
Other	6	1.9	4	2.5	1	1.4	
Student in School	0	0.0	1	0.6	0	0.0	
Missing Item	21	6.6	10	6.2	7	10.1	
OVERALL	320	100.0	161	100.0	69	100.0	

* For each variable, data reported are based on all applicable cases on analytic file.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON FAMILY INCOME VARIABLES AT PRE-CENTER*

	COMPLETER (Families:n= 627) (Spouses :n= 491)		RESIGNEE (Families:n= 287) (Spouses :n= 235)		CONTROL (Families:n= 160) (Spouses :n= 111)		F RATIO (significance)
	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	MEAN (SD)	n (missing)	
TOTAL FAMILY INCOME FROM EMPLOYMENT IN LAST YEAR (reported)	3324.15 2191.78	621 6	2501.90 1833.61	278 9	2845.25 1957.86	157 3	15.95 (0.0000)
EMPLOYMENT INCOME OF HEAD AND SPOUSE IN LAST YEAR (computed)	3891.57 2583.78	495 132	2897.55 2271.82	204 83	3082.43 2284.71	120 40	13.99 (0.0000)
TOTAL FAMILY INCOME FROM WELFARE IN LAST YEAR	476.29 940.64	575 52	357.55 732.46	260 27	478.40 838.05	131 29	1.76 (0.1727)
TOTAL FAMILY INCOME FROM OTHER SOURCES IN LAST YEAR	187.18 739.49	594 33	182.70 647.66	265 22	186.19 675.72	143 17	0.00 (0.9963)
TOTAL FAMILY INCOME IN LAST YEAR	4073.69 2212.57	562 65	3059.53 1865.48	245 42	3494.60 1900.30	125 35	21.07 (0.0000)
TOTAL FAMILY INCOME PER PERSON	1257.06 789.30	562 65	969.33 669.32	244 43	1095.32 650.91	125 35	13.34 (0.0000)
GROSS DEBTS PAYABLE IN NEXT YEAR (reported)	692.19 802.61	581 42	438.91 536.96	266 21	617.23 957.62	155 5	9.89 (0.0001)

* For each variable, data reported are based on all applicable cases on the analytic file. Missing values were dropped in computation of statistics.

Table IIIA-2

COMPLETER-RESIGNEE-CONTROL GROUP DIFFERENCES ON CATEGORICAL FINANCIAL AND SOCIAL VARIABLES AT PRE-CENTER*

	COMPLETER		RESIGNEE		CONTROL		CHI SQUARE
	n	%	n	%	n	%	(significance)
DOES FAMILY USE FOOD STAMPS							
Yes	279	44.5	108	37.6	60	37.5	5.24
No	289	46.1	147	51.2	82	51.2	
Missing Item	59	9.4	32	11.1	18	11.2	(0.2638)
OVERALL	627	100.0	287	100.0	160	100.0	
DOES FAMILY USE A BUDGET							
Yes	292	46.6	107	37.3	58	36.2	15.01
No	313	49.9	174	60.6	100	62.5	
Missing Item	22	3.5	6	2.1	2	1.2	(0.0047)
OVERALL	627	100.0	287	100.0	160	100.0	
DOES FAMILY HAVE A SAVINGS ACCOUNT							
No	449	71.6	233	81.2	129	80.6	19.86
Yes, Amount Increased	53	8.5	20	7.0	9	5.6	
Yes, Amount Decreased	61	9.7	17	5.9	17	10.6	(0.0109)
Yes, Amount Constant	42	6.7	12	4.2	5	3.1	
Missing Item	22	3.5	5	1.7	0	0.0	
OVERALL	627	100.0	287	100.0	160	100.0	
DOES FAMILY SHARE RECREATION ACTIVITIES							
Yes	542	86.4	242	84.3	137	85.6	2.06
No	61	9.7	35	12.2	15	9.4	
Missing Item	24	3.8	10	3.5	8	5.0	(0.7247)
OVERALL	627	100.0	287	100.0	160	100.0	
IS THERE A FAMILY DOCTOR							
Yes	459	73.2	177	61.7	101	63.1	15.30
No	156	24.9	104	36.2	56	35.0	
Missing Item	12	1.9	6	2.1	3	1.9	(0.0041)
OVERALL	627	100.0	287	100.0	160	100.0	
DOES FAMILY PARTICIPATE IN COMMUNITY							
Yes	150	23.9	35	12.2	11	6.9	54.56
No	184	29.3	96	33.4	30	18.8	
Missing Item	293	46.7	156	54.4	119	74.4	(0.0000)
OVERALL	627	100.0	287	100.0	160	100.0	

* For each variable, data reported are based on all applicable cases on the analytic file.

families are assigned to both groups. It will be seen in Section 4 that these control groups result in a very good match to the corresponding participant groups with respect to the pre-Center characteristics.

2.0 THEORY AND DISCUSSION OF THE GENERAL APPROACH TO PARTITIONING THE CONTROL GROUP

The first step in this approach was to select those variables which discriminated the completers from the resignees. This was the crucial step because these variables are to be used to classify the non-participants into likely completers and likely resignees.

Since the nonparticipants as a group were different from both the completers and non-completers it was very important to try to find the actual factors influencing a participant to complete or resign from the program rather than just achieving good prediction in the participant population. In this respect, the significance of the variables was emphasized over the goodness of prediction (size of R^2). It was better to have a relatively few good discriminators which one could reasonably interpret as relevant factors as opposed to many nonsignificant predictors capitalizing on chance to achieve good predictability with respect to the participants, but which failed to predict adequately when applied to the group of nonparticipants.

Comparisons among completers, non-completers and controls were made on each of 58 characteristics as measured at pre-Center. Of these 58 univariate comparisons, 33 characteristics showed significant differences among the three groups at pre-Center. Of these, 23 characteristics (variables) were used as predictors to conduct a preliminary discriminant analysis on completers and non-completers. The 10 discriminators not used at this stage were dropped because of substantial missing data or for other practical considerations. From the results of this discriminant analysis the 5 predictor variables with the largest standardized coefficients were selected for use in the procedure to be described below. In the order of the size of their standardized coefficients these variables are:

CHARACTERISTIC	BETA
1. Years of Education, HOH (E)*	.50
2. Housing Status (H)	.35
3. Number of Children (C)	.30
4. Race of HOH (R) and	.27
5. Gross Family Employment Income (I)	.20

These variables were then dichotomized as follows. The three quasi-continuous variables were dichotmoized at the median; Owners and renters were combined as a single category vs. all others; Race was dichotomized as White vs. all others.

The purpose of dichotomizing was twofold. First, it substantially simplified an analysis which allowed for the presence of all possible interaction effects. Second, for the given sample size, dichotomization reduces the number of empty cells in the 6-way table to a manageable number. The median was selected as the cutoff point for the continuous variables so that the number of empty cells would be minimized. The number of empty cells is an important consideration for the maximum likelihood techniques that were used. (See, e.g., Bishop, Feinberg and Holland, 1975).

Goodman's ECTA computer program was then used to estimate the effects of the variables under various models. (A discussion of the algorithm can be found in the appendix of Goodman, 1971). The final model selected was the most parsimonious model which both fit the data and was readily interpretable.

Regarding the possible loss of information due to dichotomization: if a variable is a good discriminator it will likely continue to show up as a good discriminator when dichotomized. Moreover, after a good fitting model is chosen, the most important dichotomy could always be expanded to a trichotomy and the model reestimated to determine whether such expansion significantly improves discrimination. The variables can be expanded thusly so long as the number of empty cells is manageable.

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*Letters in parentheses will be used as short identifiers of these variables in subsequent discussions.

2.1 The Statistical Methodology

We now give a brief statistical justification for the use of the above maximum likelihood approach as an alternative to the usual linear discriminant analysis. The end results of either approach are estimates of the probability of completing the program for given values of the discriminators. These probabilities were then used to partition the controls into the desired classes. The results are presented in Section 3.

The maximum likelihood approach mentioned above as accomplished via Goodman's ECTA computer program is the special case of logit analysis where all explanatory variables are qualitative. Not only does the use of qualitative variables allow one to easily analyze all possible interaction effects, but the logit analysis alternative to discriminant analysis has another advantage.

Nerlove and Press (1973, p. 14) show that under the classical assumptions of discriminant analysis, a parametric representation for the probability of being in a certain population (say, completers or resignees) given the values of the discriminators can be expressed in the form of the logistic cumulative density function.

$$P_j = \frac{1}{1 + e^{-(X'\beta + \alpha)}}$$

where X denotes the vector of discriminators. Hence, the conditional probabilities of discriminant analysis can be estimated directly using the maximum likelihood approach as performed by logit analysis.

Halperin, Blackwelder and Verter (1971) compared the conditional maximum likelihood estimates based on the logit model to the usual discriminant function estimators assuming that some of the discriminators were dichotomous. The results showed that the maximum likelihood approach gave somewhat better fits to the model than the classical discriminatory procedures.

2.1.1 Estimation of the Probability of Completing by the Maximum Likelihood Method

The probabilities of completing the program for the 914 then known completers and resignees were estimated by various logit models using Goodman's ECTA (Everyman's Contingency Table Analyzer) computer program. The particular models estimated were selected by the process of stepwise backwards elimination as discussed by Goodman (1971). For interpretability, those models assuming higher than two-way interaction were excluded from consideration as a candidate for the final model.

Table 2F.2-1 summarizes the results of these models fitted using the 914 known completers and non-completers. These models range from the unrestricted (fully saturated) model H_0 with zero degrees of freedom to the main-effects-only model H_8 which has 26 degrees of freedom for the 26 interaction effects restricted to zero. Notice that the latter model does not fit the data very well. This model would be rejected at the $\alpha = .06$ level in favor of an interaction model. In addition to the significance level, the goodness of fit chi-square (X_G^2) and the likelihood ratio chi-square (X_L^2) are also reported for each model in Table 2F.2-1.

The interaction model selected was that model with the largest significance level of those considered, namely model H_2. Table 2F.2-2 shows how the probability estimates under this model compare with the observed proportions. And indicated by the significance level of .33, the fit is reasonably good.

The effects of the variables estimated by model H_2 are given in Table 2F.2-3. Notice that the best discriminator is Education, the more educated group being the more likely to complete the program. This is also indicated by Table 2F.2-2 where it is seen that those reference classes with the highest percentage of completers tend to be less educated participants.

Education is closely followed by Race and Housing as other good discriminators. The completers were likely to be highly educated whites who own or rent their housing.

Table IIIA-3

The Main Effects and Interaction Effects Models and Associated Goodness of Fit Chi Square Values for Models Fit Using Data on 914 Known Completers and Resignees

Model	Explanatory Variables	Degrees of Freedom	Chi Square X^2_G	X^2_L	Probability Value
H_0	Saturated Model	0	0	0	--
H_1	I, H, C, E, R, CR, IE, IR, HE, CE, IH	20	20.5	22.4	.32
H_2	I, H, C, E, R, CR, IE, IR, HE, CE	21	21.2	23.3	.33
H_3	I, H, C, E, R, CR, IE, IR, HE	22	23.3	25.0	.27
H_4	I, H, C, E, R, CR, IE, HE, CE	22	23.3	25.0	.30
H_5	I, H, C, E, R, CR, IE, HE	23	25.8	27.4	.24
H_6	I, H, C, E, R, CR, HE	24	28.7	29.6	.20
H_7	I, H, C, E, R, CR	25	30.6	31.6	.17
H_8	I, H, C, E, R	26	37.9	38.3	.06

Table IIIA-4

Probability of Participants Completing the Program for Each of 32 Profiles of Characteristics Based on Education and Race of Family Head, Housing Status, Number of Children and Gross Family Employment Income

	PROFILE OF CHARACTERISTICS						PROBABILITY OF COMPLETING	
	(E) EDUCATION (1 = high) (0 = low)	(R) RACE (1 = white) (0 = other)	(H) HOUSING (1=own/rent) (0 = other)	(C) # CHILDREN 1 = ≥ 2 0 = < 2	(I) INCOME (1 = high) (0 = low)	n	ESTIMATED	OBSERVED
1.	1	1	1	1	1	82	.89	.89
2.	1	1	1	1	0	54	.86	.85
3.	1	1	1	0	1	83	.86	.87
4.	1	0	1	1	0	10	.85	.90
5.	1	0	1	1	1	9	.82	.78
6.	1	1	1	0	0	69	.82	.87
7.	0	1	1	0	1	74	.78	.78
8.	1	1	0	1	1	9	.74	.89
9.	0	1	1	1	1	109	.73	.70
10.	1	1	0	0	1	11	.69	.82
11.	0	1	0	0	1	27	.69	.62
12.	1	1	0	1	0	6	.68	.67
13.	1	0	0	1	0	7	.67	.57
14.	1	0	1	0	0	11	.64	.64
15.	0	1	0	1	1	3	.63	1.00
16.	1	1	0	0	0	24	.62	.58
17.	1	0	0	1	1	1	.62	.00
18.	0	0	1	0	1	8	.61	.75
19.	0	1	1	0	0	55	.61	.53
20.	1	0	1	0	1	13	.59	.31
21.	0	1	1	1	0	72	.55	.56
22.	0	0	1	1	0	24	.53	.54
23.	0	0	0	1	1	7	.50	.43
24.	0	1	0	0	0	34	.49	.44
25.	0	0	1	0	1	16	.45	.62
26.	0	1	0	1	0	15	.43	.47
27.	0	0	0	1	0	11	.42	.45
28.	1	0	0	0	0	17	.39	.29
29.	0	0	1	0	0	25	.37	.36
30.	0	0	0	0	1	3	.35	.33
31.	1	0	0	0	1	2	.34	1.00
32.	0	0	0	0	0	23	.27	.35

COMPLETERS

RESIGNEES

Table IIIA-5

The Main Effects and Interaction Effects Estimated by Model H_2, as Fit Using 914 Known Completers and Resignees

Variable	Main Effects*
Education (E)	.202
Race (R)	.187
Housing (H)	.186
Children (C)	.112
Income (I)	.075

Variable	Interaction Effects
Children/Race (CR)	.113
Housing/Education (HE)	-.070
Income/Education (IE)	.065
Income/Race (IR)	-.062
Children/Education (CE)	-.062

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*Positive values indicate propensity to complete program.

The interaction effects indicate that the main effects differ in size for the different classes. For example, the relatively large interaction effect of .113 associated with the Race/Children pair indicates that the effect of .112 of having two or more children was higher for white participant families than for nonwhites.

These effects can be converted to the estimated probabilities of completing the program as follows.

1. Define the following indicator variables

$$XE=\begin{cases}1 & \text{for highly educated}\\ -1 & \text{for other}\end{cases}$$

$$XR=\begin{cases}1 & \text{for White}\\ -1 & \text{otherwise}\end{cases}$$

$$XH=\begin{cases}1 & \text{if own or rent housing}\\ -1 & \text{otherwise}\end{cases}$$

$$XC=\begin{cases}1 & \text{if more than 2 children}\\ -1 & \text{otherwise}\end{cases}$$

$$XI=\begin{cases}1 & \text{for high income}\\ -1 & \text{for others}\end{cases}$$

$XCR = XC*XR$

$XHE = XH*XE$

$XIE = XI*XE$

$XIR = XI*XR$

$XCE + XC*XE$

2. Calculate the estimate log-odds as follows:

$$LOGIT = .202XE + .187XR + .186XH + .112SC + 075XI + .113XCR - .070XHE - .065XIE - .06XIR - .062XCE$$

3. The estimated probability of completing is then
PROB = EXP(LOGIT)/(1+EXP (LOGIT))
where EXP refers to the exponential function

$$\text{i.e., PROB} = \frac{e^{\text{LOGIT}}}{1 + e^{\text{LOGIT}}} = \frac{\text{odds}}{1 + \text{odds}}$$

In summary, using five variables to discriminate between the completers and resigning families, the participants were classified into 32 equivalence-classes ranging from the class estimated to be most likely to complete to the class least likely to complete. The probabilities may be interpreted as follows. Assuming all other factors to be stochastic, it is estimated that (on the average) it is estimated that this percentage of participants having the characteristics associated with the given class would have completed the program.

The partition algorihm demonstrated in Table 2F:2-2 was then applied to the control population. We assumed that each control class was similar to the corresponding participant class not only with respect to the five dichotomies defining the reference classes, but also with respect to other characteristics as well. In particular, we assumed that they were similar to, and hence approximately exchangeable with, the corresponding participant families with respect to the unknown factors relevant to the outcomes.

Of course, it was impossible to create an emprical test of the latter assumption due to the unknown factors. However, it was possible to see whether these classes were similar with respect to pre-Center characteristics other than those five used to create the partitions. Controls estimated to be most likely to complete do in turn out to be similar to the completers with respect to almost all other pre-Center characteristics. The same is true of the non-complete controls with respect to the actual non-completers. As defined in the next section, the completer controls and the resignee controls give a reasonably good match to the corresponding participant families.

2.1.2 Defining the Control Groups for Completers and Non-Completers

Once again, consider the partition defined in table 2F.2-2 as applied to the control population. The classes were ranked from high to low on the estimated probability of completing. Thus, the first classification (the higher educated, white, high income control families who have two or more children and own or rent their housing) was estimated to be the most likely completers. Similarly, the last classification listed in the table was estimated to be the most likely to resign.

The control group for the completers was then defined by specifying a particular probability cutoff level. All control families having an estimated probability of completing at this level or higher comprised the completer control group. This is designated in Table 2F.2-2 by an upward arrow beginning at the estimated probability .61. These 19 groups of control families were the most likely to complete, as estimated by the maximum likelihood approach described previously.

The particular cutoff level of .61 was chosen because it was the level producing the best match to the pre-Center characteristics. Notice that if the level had been chosen too high, the control classes would not be representative of the participants who completed the program. For example, if the level chosen had been as high as .80, the control classes selected as the completer control group would have been higher educated families. (These control families would have been predicted as being more likely than actual participant completers to complete the program, given only their class!) A second criterion in selecting the probability cutoff point was to define a control group sufficiently large to be usable in our analyses.

For purposes of comparison, a second cutoff point of .62 was also selected. Although both yielded good matches, the match associated with the .61 cutoff was somewhat better.

A similar procedure was used for the non-completers. All classes having an estimated completion probability of .83 or less comprise the non-completer control group. This is designated by the downward pointing arrow below .85. Other probability cutoffs for the non-completer controls. which led to somewhat less good matches were .80, .73 and .70.

Notice that there was an overlap between the completer control group and the non-completer control group. Fifteen of the same control classes were used in both groups. In a typical discriminant analysis application the two groups are mutually exclusive. The present application was not a standard discriminant analysis application since the analysis of program effects upon the completers using the completer controls as the comparison group was performed separately from the analysis of the non-completer group. Moreover, if a single cutoff probability level had been chosen in Table 2F.2-2, thereby splitting the control population into two mutually exclusive control groups, the misclassification rate would be approximately 30%. This would have been only marginally better than the decision rule which assigned all controls to the completer-control group, since completers comprise 69% of the participant population! Although the overlapping control groups may seem unusual, it was nevertheless appropriate for the present situation.

Since the objective of partitioning the control group was to define valid comparison groups for the completers and non-completers, we assessed the success of our partitioning procedure in terms of how few statistically significant differences we could find in a new set of pre-Center comparisons.

2.2 Summary of the Results

Tables 2F.2-4 through 2F.2-7 display pre-Center comparisons for all participants, as well as separate comparisons for completers and non-completers with their corresponding control groups. The probability values associated with the completers and with the non-completers are mostly substantial in size indicating quite good matches given by the control subgroups defined earlier in this section.

Specifically, when all participants were compared with all controls, 10 comparisons showed results significant at the .05 level or beyond. Only three completer vs. completer control comparisons were statistically significant, while five such non-completer comparisons were significant.

Recall the three-group comparisons presented in Tables 2F.1-9 through 2F.1-16, which were indicative of a very poor match given by the overall control group, expecially when used as a comparison group for the non-completers. By selecting appropriate subsets of the control families by the methods described earlier in this section, we obtained what appeared to be reasonably good comparison groups for the completers and non-completers.

Let us now examine a few of these comparisons in detail. Notice first that there were good matches (nonsignificant differences) between the completer-controls and non-completer-participants with respect to the five variables used in defining these control subgroups (i.e., education, race of head, housing status, number of children and total family income). For each of these five variables, the use of the control subgroups was a substantial improvement over the use of all control families as a comparison group for both completers and non-completers (the procedure followed in The Telephone Book).

For example, consider "race." While 85% of the completers were white and 67% of the non-completers were white, the total control population consisted of 81% white families. By restricting the set of control families to the completer-control subset and the non-completer control subset of families, this latter percentage became 91% and 74% white families respectively, which gave a good match to the completer and non-completer participants. These results were similar for the other four variables as well.

Table IIIA-6

Demographic Characteristics: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

	ALL PARTICIPANTS		ALL CONTROLS		χ^2	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		χ^2	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		χ^2
VARIABLE DESCRIPTION	n	%	n	%	(signif)	n	%	n	%	(signif)	n	%	n	%	(signif)
SEX, HEAD OF FAMILY (P002)															
Male	732	80.1	114	71.2		494	78.8	82	69.5		238	82.9	85	74.6	
Female	182	19.9	46	28.7	.0157*	133	21.2	36	30.5	.0364*	49	17.1	29	25.4	.0769
SEX, SPOUSE (P013)															
Male	4	0.6	0	0		4	0.8	0	0		0	0	0	0	
Female	722	99.4	111	100.0	.9641	487	99.2	79	100.0	.9371	235	100.0	84	100.0	NA
RACE OF HEAD OF FAMILY (P012)															
White	727	79.5	130	81.3		534	85.2	108	91.5		193	67.2	84	73.7	
Indian	130	14.2	26	16.2		56	8.9	8	6.8		74	25.8	26	22.8	
Other	57	6.2	4	2.5	.1509	37	5.9	2	1.7	.1132	20	7.0	4	3.5	.2995
RACE OF SPOUSE (P018)															
White	582	80.2	83	74.8		450	85.5	69	87.3		162	68.9	59	70.2	
Indian	97	13.4	23	20.7		39	7.9	8	10.1		58	24.7	21	25.0	
Other	47	6.5	5	4.5	.1007	32	6.5	2	2.5	.3277	15	6.4	4	4.8	.8647
MARITAL STATUS (P006)															
Married	731	80.0	111	69.4		495	78.9	79	66.9		236	82.2	84	73.7	
Not Married	183	20.0	49	30.6	.0037*	132	21.1	39	33.1	.0065*	51	17.8	30	26.3	.0743
STATE OF ORIGIN (P010)															
Idaho	157	17.2	24	15.0		107	17.1	14	11.9		50	17.4	22	19.3	
Montana	152	16.6	27	16.9		102	16.3	20	16.9		50	17.4	20	17.5	
Nebraska	150	16.4	27	16.9		104	16.6	23	19.5		46	16.0	18	15.8	
North Dakota	137	15.0	29	18.1		109	17.4	26	22.0		28	9.8	15	3.2	
South Dakota	143	15.6	25	15.6		95	15.2	13	11.0		48	16.7	21	18.4	
Wyoming	175	19.1	28	17.5	.9168	110	17.5	22	18.6	.4670	65	22.6	18	15.8	.6946
HOUSING STATUS (P211)															
Own	78	8.5	21	13.1		60	9.6	13	11.0		18	6.3	14	12.3	
Rent	644	70.5	108	67.5		467	74.5	92	78.0		177	61.7	59	60.5	
Live With Others	192	21.0	31	19.4	.1774	100	15.9	13	11.0	.3742	92	32.1	31	27.2	.1143
FLUSH TOILET (P217)															
Yes	870	95.2	155	96.9		606	96.7	117	99.2		264	92.0	109	95.6	
No	44	4.8	5	3.1	.4598	21	3.3	1	0.8	.2394	23	8.0	5	4.4	.2852
TELEPHONE (P218)															
Yes	470	51.4	77	48.1		352	56.1	62	52.5		118	41.1	50	43.9	
No	444	48.6	83	51.9	.4940	275	43.9	56	47.5	.5348	169	58.9	64	56.1	.6963

Table IIIA-6

Demographic Characteristics: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

	ALL PARTICIPANTS		ALL CONTROLS			COMPLETER PARTICIPANTS		COMPLETER CONTROLS			RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		
VARIABLE DESCRIPTION	MEAN	SD	MEAN	SD	F RATIO (signif)	MEAN	SD	MEAN	SD	F RATIO (signif)	MEAN	SD	MEAN	SD	F RATIO (signif)
EDUCATION, HEAD OF FAMILY (highest grade completed) (P005)	10.7	1.7	10.8	1.6	.4947	10.9	1.6	11.2	1.5	.1369	10.1	1.8	10.2	1.6	.7291
EDUCATION, SPOUSE (highest grade completed) (P016)	10.7	1.8	10.5	1.5	.3219	10.9	1.7	10.7	1.5	.5345	10.4	1.8	10.4	1.5	.9714
AGE, HEAD OF FAMILY (HAGE)	26.6	7.0	27.2	7.0	.2912	27.1	7.0	27.6	7.4	.3247	25.5	6.9	26.7	7.1	.1182
AGE, SPOUSE (SAGE)	23.5	5.8	23.9	6.0	.5059	24.0	6.0	24.4	6.4	.6283	22.3	5.2	23.8	6.0	.0372*
NUMBER OF CHILDREN (NUMKIDS)	1.8	1.4	1.8	1.2	.6735	1.8	1.4	1.8	1.3	.8792	1.6	1.4	1.7	1.2	.5403
NUMBER IN HOUSEHOLD (P007)	3.6	1.4	3.5	1.3	.6472	3.6	1.5	3.5	1.4	.3937	3.5	1.4	3.4	1.3	.8718
NUMBER OF ROOMS (P216)	4.3	1.6	4.3	1.6	.7590	4.4	1.5	4.3	1.5	.5903	4.1	1.6	4.3	1.4	.2444
PEOPLE PER ROOM (PPROOM)	0.9	0.5	0.9	0.5	.6157	0.9	0.4	0.9	0.5	.9250	1.0	0.6	0.9	0.4	.0730
NUMBER OF CITIES LIVED IN IN LAST FIVE YEARS (P221)	2.3	1.3	2.1	1.1	.1178	2.3	1.3	2.1	1.1	.0630	2.3	1.3	2.2	1.1	.1789
NUMBER OF STATES LIVED IN IN LAST FIVE YEARS (P222)	1.6	0.8	1.6	0.7	.6572	1.6	0.8	1.6	0.7	.7712	1.7	0.9	1.6	0.7	.5023
GROSS RENT (rent plus utilities) (GROSRENT)	82.0	53.0	80.0	52.0	.6109	88.1	50.0.	89.6	50.0	.7622	$70	$58	$73	$54	.6602
GROSS RENT AS % OF TOTAL INCOME (RENTOINC)	0.3	0.5	0.4	0.8	.0658	0.3	0.5	0.4	0.7	.2655	0.3	0.4	0.4	0.9	.0380*

Table IIIA-6

Employment Characteristics of Head and Spouse: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee-Controls

VARIABLE DESCRIPTION	ALL PARTICIPANTS		ALL CONTROLS		χ^2	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		χ^2	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		χ^2
	n	%	n	%	(signif)	n	%	n	%	(signif)	n	%	n	%	(signif)
HOH PRESENTLY EMPLOYED (P149)															
Yes	387	42.3	72	45.0		284	45.3	56	47.5		103	35.9	47	41.2	
No	527	57.7	88	55.0	.5889	343	54.7	62	52.5	.7399	184	64.1	67	58.8	.3776
HOH LOOKING FOR WORK (P150)															
Yes	452	49.5	73	45.6		284	45.3	53	44.9		168	58.5	58	50.9	
No	462	50.5	87	54.4	.4192	343	54.7	65	55.1	.9802	119	41.5	56	49.1	.1993
HOH TYPE OF INDUSTRY most recent job (P024)															
Agriculture, Forestry and Fisheries	86	9.4	13	8.1		66	10.5	10	8.5		20	7.0	10	8.8	
Mining	18	2.0	3	1.9		12	1.9	1	0.8		6	2.1	2	1.8	
Construction	176	19.3	31	19.4		113	18.0	22	18.6		63	22.0	22	19.3	
Manufacturing	160	17.5	26	16.2		106	16.9	17	14.4		54	18.8	22	19.3	
Transportation, Communications and Public Utilities	44	4.8	7	4.4		29	4.6	6	5.1		15	5.2	4	3.5	
Wholesale, Retail Trade	143	15.6	31	19.4		109	17.2	28	23.7		35	12.2	21	18.4	
Finance, Insurance and Real Estate	7	0.8	1	0.6		7	1.1	1	0.8		0	0	1	0.9	
Business and Repair Services	45	4.9	8	5.0		35	5.6	7	5.9		10	3.5	6	5.3	
Personal Services	33	3.6	7	4.4		21	3.3	2	1.7		12	4.2	6	5.3	
Entertainment, Recreation	7	0.8	1	0.6		3	0.5	0	0		4	1.4	1	0.9	
Professional Services	61	6.7	6	3.7		43	6.9	5	4.2		18	6.3	1	0.9	
Public Administration	37	4.0	8	5.0		21	3.3	5	4.2		16	5.6	6	5.3	
Military	7	0.8	1	0.6		4	0.6	1	0.8		3	1.0	0	0	
Other	17	1.9	1	0.6		9	1.4	1	0.8		8	2.8	0	0	
Student in School	8	0.9	1	0.6		5	0.8	1	0.8		3	1.0	1	0.9	
Not Employed in Last Year	65	7.1	15	9.4	.9730	45	7.2	11	9.3	.9406	20	7.0	11	9.6	.3080

Table IIIA-6

Employment Characteristics of Head and Spouse: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

VARIABLE DESCRIPTION	ALL PARTICIPANTS		ALL CONTROLS		χ^2 (signif)	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		χ^2 (signif)	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		χ^2 (signif)
	n	%	n	%		n	%	n	%		n	%	n	%	
SPOUSE PRESENTLY EMPLOYED (P152)															
Yes	149	20.5	17	15.3		112	22.8	12	15.2		37	15.7	11	13.1	
No	577	79.5	94	87.7		379	77.2	67	84.8		198	84.3	73	86.9	
No Spouse	237				.2496	175				.1686	82				.6854
SPOUSE PRESENTLY LOOKING FOR WORK (153)															
-Yes	118	16.3	18	16.2		73	14.9	13	16.5		45	19.1	12	14.3	
No	608	83.7	93	83.8		418	85.1	66	83.5		190	80.9	72	85.7	.4059
No Spouse	237				.8980	175				.8441	82				
SPOUSE TYPE OF INDUSTRY most recent job (P104)															
Agriculture, Forestry and Fisheries	9	1.2	0	0		8	1.6	0	0		1	0.4	0	0	
Mining	3	0.4	0	0		3	0.6	0	0		0	0	0	0	
Construction	25	3.4	9	8.1		22	4.5	5	6.3		3	1.3	7	8.3	
Manufacturing	35	4.8	2	1.8		23	4.7	1	1.3		12	5.1	0	0	
Transportation, Communications and Public Utilities	5	0.7	1	0.9		3	0.6	1	1.3		2	0.9	22	26.2	
Wholesale, Retail Trade	176	24.2	32	28.8		113	23.0	27	34.2		63	26.8	0	0	
Finance, Insurance and Real Estate	5	0.7	0	0		1	0.2	0	0		4	1.7	0	0	
Business and Repair Services	7	1.0	0	0		6	1.2	0	0		1	0.4	3	3.6	
Personal Services	53	7.3	6	5.4		29	5.9	4	5.1		24	10.2	0	0	
Entertainment, Recreation	11	1.5	0	0		4	0.8	0	0		7	3.0	0	0	
Professional Services	58	8.0	3	2.7		41	8.4	3	3.8		17	7.2	2	2.4	
Public Administration	19	2.6	3	2.7		12	2.4	1	1.3		7	3.0	3	3.6	
Military	2	0.3	0	0		2	0.4	0	0		0	0	0	0	
Other	9	1.2	0	0		5	1.0	0	0		4	1.7	0	0	
Student in School	0	0	0	0		0	0	0	0		0	0	0	0	
Not Employed in Last Year	309	42.6	55	49.5	.1205	219	44.6	37	46.8	.5019	90	38.3	45	53.6	.0082*

Table IIIA-6

Employment Characteristics of Head and Spouse: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

VARIABLE DESCRIPTION	ALL PARTICIPANTS		ALL CONTROLS		F RATIO (signif)	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		F RATIO (signif)	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		F RATIO (signif)
	MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD	
HEAD OF HOUSEHOLD															
NUMBER OF WEEKS UNEMPLOYED LAST YEAR (WKUNEMH)	20.1	16.9	22.1	17.0	.1836	18.3	16.9	18.8	16.6	.7456	24.2	16.2	24.0	16.4	.9061
NUMBER OF JOBS IN LAST YEAR (NJOBH)	2.1	1.3	2.1	1.3	.8631	2.1	1.3	2.1	1.4	.7416	2.2	1.3	2.1	1.3	.7057
EMPLOYMENT INCOME IN LAST YEAR (EINCH)	$3078	2016	$2746	1813	.0517*	$3302	$2113	$3070	$1895	.2669	2588	$1961	$2518	$1710	.7096
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR (ADURH)	299	642.0	306	514.0	.9022	340.3	735.4	345.2	574.5	.9449	08.6	346.2	279.0	479.4	.1025
OCCUPATIONAL STATUS most recent job (NPO30)	24.5	19.3	24.5	20.1	.9877	25.7	20.1	25.4	20.0	.8788	21.8	17.2	23.0	19.5	.5438
MONTHLY SALARY most recent job (PO31)	$382	206	$334	186	.0066*	$ 389	$ 215	$ 344	$ 196	.0352*	367	$ 187	$ 334	$ 184	.1187
SPOUSE															
NUMBER OF WEEKS UNEMPLOYED LAST YEAR (WKUNEMS)	39.6	16.9	43.3	14.3	.0315*	38.7	18.0	42.2	15.3	.0993	41.6	14.4	45.0	12.3	.0617
NUMBER OF JOBS IN LAST YEAR (NJOBS)	0.8	0.9	0.7	0.8	.1522	0.8	0.9	0.7	0.8	.7597	0.8	0.9	0.6	0.8	.0593
EMPLOYMENT INCOME IN LAST YEAR (EINCS)	$762	1143	$566	952	.0857	$ 807	$1210	$ 654	$1054	.2888	$ 669	$ 987	$ 475	$ 855	.1119
AVERAGE DURATION IN DAYS OF JOBS HELD LAST YEAR (ADURS)	136	421	98	304	.3530	121.5	276.9	116.4	353.3	.8838	166.7	622.4	57.6	102.9	.1114
OCCUPATIONAL STATUS most recent job (NP110)	16.7	19.3	13.0	16.0	.0506*	15.9	18.9	14.3	16.9	.4623	18.4	20.0	10.7	13.5	.0011*
MONTHLY SALARY most recent job (P111)	$159	155	$126	138	.0357*	$ 154	$ 156	$ 133	$ 140	.2768	$ 170	$ 153	$ 116	$ 140	.0048*

Table IIIA-2

Family Income Characteristics: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

VARIABLE DESCRIPTION	ALL PARTICIPANTS		ALL CONTROLS		F RATIO (signif)	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		F RATIO (signif)	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		F RATIO (signif)
	MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD	
TOTAL FAMILY INCOME FROM EMPLOYMENT IN LAST YEAR (FAMEINC)	$3377	2035	$2994	1879	.0266*	$3629	2089	$3367	1925	.2055	$2826	$1793	$2714	$1793	.5759
TOTAL FAMILY INCOME FROM WELFARE IN LAST YEAR (WELINC)	$ 441	846	$ 471	765	.6688	$ 477	903	$ 421	691	.4248	361	$ 699	$ 473	$ 783	.1653
TOTAL FAMILY INCOME FROM "OTHER" SOURCES IN LAST YEAR (P163)	186	691	$ 188	639	.9751	$ 187	720	$ 206	689	.7918	183	$ 624	$ 130	$ 398	.3905
TOTAL FAMILY INCOME FROM ALL SOURCES IN LAST YEAR (TOTINC)	$4003	2006	$3652	1801	.0388*	$4293	2041	$3994	1768	.1363	3370	$1774	$3316	$1748	.7830
TOTAL FAMILY INCOME FROM ALL SOURCES PER PERSON (INCPP)															
GROSS DEBTS PAYABLE IN NEXT YEAR (P166)	615	713	$ 618	943	.9577	$ 689	775	$ 680	996	.9050	452	$ 521	$ 546	$ 902	.1910
FAMILY EMPLOYMENT INCOME PER PERSON (EINCPP)	1071	765	$ 919	644	.0181*	$ 1146	792	$1034	667	.1522	908	$ 674	$ 845	$ 627	.3909

Table IIIA-6

Financial and Social Characteristics; Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

VARIABLE DESCRIPTION	ALL PARTICIPANTS		ALL CONTROLS		χ^2 (signif)	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		χ^2 (signif)	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		χ^2 (signif)
	n	%	n	%		n	%	n	%		n	%	n	%	
DOES FAMILY USE FOOD STAMPS (FOODSTAM)															
Yes	401	43.9	64	40.0		292	46.6	45	38.1		109	38.0	43	37.7	
No	513	56.1	96	60.0	.4090	335	53.4	73	61.9	.1123	178	62.0	71	62.3	.9476
DOES FAMILY USE A BUDGET (P173)															
Yes	410	44.9	59	36.9		302	48.2	51	43.2		108	37.6	33	28.9	
No	504	55.1	101	63.1	.0732	325	51.8	67	56.8	.3753	179	62.4	81	71.1	.1268
DOES FAMILY HAVE A SAVINGS ACCOUNT (P167)															
Yes	205	22.4	31	19.4		156	24.9	27	22.9		49	17.1	22	19.3	
No	709	77.6	129	80.6	.4490	471	75.1	91	77.1	.7292	238	82.9	92	80.7	.7028
DOES FAMILY SHARE RECREATION ACTIVITIES (P210)															
Yes	818	89.5	145	90.6		566	90.3	106	89.8		252	87.8	105	92.1	
No	96	10.5	15	9.4	.7705	61	9.7	12	10.2	.9832	35	12.2	9	7.9	.2865
IS THERE A FAMILY DOCTOR (P225)															
Yes	653	71.4	104	65.0		471	75.1	84	71.2		182	63.4	69	60.5	
No	261	28.6	56	35.0	.1200	156	24.9	34	28.8	.4330	105	36.6	45	39.5	.6710

Table IIIA-6

Financial and Social Characteristics: Pre-Center Comparisons for the Actual Population by All Participants/All Controls, Completer-Participants/Completer-Controls, Resignee-Participants/Resignee Controls

VARIABLE DESCRIPTION	RESIGNEE PARTICIPANTS		RESIGNEE CONTROLS		F RATIO (signif)	COMPLETER PARTICIPANTS		COMPLETER CONTROLS		F RATIO (signif)	ALL PARTICIPANTS		ALL CONTROLS		F RATIO (signif)
	MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD		MEAN	SD	MEAN	SD	
[illegible] OF COMMUNITY [illegible] ENGAGED IN BY [illegible] COMBINED	.54	.87	.48	.84	.35	.53	.86	.62	.93	.29	.45	.79	.37	.68	.32
[illegible] ENGAGED IN BY [illegible]	.49	.88	.46	.86	.69	.51	.89	.57	.95	.52	.44	.82	.32	.70	.16
[illegible] COMMUNITY [illegible] ENGAGED IN BY [illegible]	.39	.73	.28	.70	.14	.37	.80	.45	.76	.43	.24	.61	.27	.65	.72

Next, recall the key assumption stated earlier. We assumed that each of the control classes as defined in Table 2F.2-2 was similar to the corresponding participant class not only with respect to the five dichotomies defining the partition but also with respect to the other pre-Center characteristics as well. If this assumption were true, the set of control classes comprising the completer-control group should have been similar on other salient characteristics to the group of all participant-completers, since the great majority of participant-completers fell in those classes. By similar reasoning, it would be expected that the non-completer controls would be similar to the participant-non-completers. Indeed, the results supported this assumption.

Consider next "Number of weeks unemployed last year," one of the pre-Center characteristics not used in defining the control subgroup. The participant-completers were unemployed an average of 18 weeks while the average non-completer spent 24 weeks without a job. The average control family again fell somewhere in between, at 22 weeks. The completer- and non-completer-control subgroups yielded figures of 19 weeks and 24 weeks respectively, again an excellent match to the completer and resignee participants. The resulting goodness of match was similar in almost all other instances where the overall control group was fiarly similar to the group of all participant families.

APPENDIX III-B

ATTRITION STUDIES

ATTRITION STUDIES

1.0 OVERVIEW OF THE PROBLEM

A standard problem arising in any study utilizing pre- and post-treatment measures is subject mortality or attrition: some of the cases who start the study drop out for various reasons. The longer the interval between pre-testing and follow-up, the more likely it is that attrition will become a problem. In the case of the evaluation of the Mountain-Plains program, follow-up data collection on a geographically mobile group of respondents sometimes took place up to three years after the pre-Center interview. Therefore, the attrition problem required that we closely examine its consequences.

The severity of the attrition rate on each of the follow-up interviews is reflected by Table 2A.1-1. The noninterviewed families appeared in almost all possible combinations and could not easily be identified by any single characteristic. Since nonrespondents often differ from respondents in important ways, attrition created possibilities for the following methodological difficulties:

- Biased estimates -- For example, the average income of the interviewed families who completed the program was likely to be a biased estimate of the average income of all completing participants. Biased estimates were also likely with respect to the other outcome measures as well, for both the non-completer and control families. This stems from the greater stability of the life situations of the families most easily tracked and interviewed.

- Misleading comparisons of repeated measures -- The number of interviewed families varied over the four follow-up periods and did not consist of the same families (except for those families who received all four follow-up interviews). A comparison of estimated effects at each of the four follow-up times based only upon those families who were interviewed at each of the specified times might well have been misleading, since the estimates were based on different subsets of families.

Figure 2A.1-1

Follow-Up Interview Histories (AAI & MP Interviews)

INTERVIEW HISTORY				ALL PARTICIPANTS	ALL CONTROLS	COMPLETER PARTICIPANTS	COMPLETER CONTROLS	RESIGNEE PARTICIPANTS	RESIGNEE CONTROLS	TOTAL
6	12	18	24							
1	1	1	1	29	28	18	20	11	19	57
1	1	1	0	50	13	36	7	14	10	63
0	1	1	1	8	5	6	4	2	4	13
1	1	0	1	10	5	7	5	3	3	15
1	1	0	0	40	5	28	2	12	4	45
0	1	1	0	2	5	2	4	0	3	7
1	0	1	1	2	0	2	0	0	0	2
0	0	1	1	1	0	1	0	0	0	1
1	0	0	0	59	5	43	3	16	4	64
1	0	1	0	18	0	11	0	7	0	18
1	0	0	1	10	4	4	2	6	4	14
0	1	0	1	8	0	2	0	6	0	8
0	1	0	0	18	16	12	13	6	12	34
0	0	1	0	10	7	5	6	5	3	17
0	0	0	1	2	2	0	1	2	2	4
0	0	0	0	154	18	73	10	81	15	172
			N =	419	113	249	77	170	83	534

The remainder of this appendix describes a weighting procedure used to investigate these potential problems. The general principle used was to weight respondents proportionately to nonrespondents with the same set of basic demographic characteristics.

2.0 General Discussion and Theory

The cross-tabulation weighting approach discussed in this section was previously employed by Astin and Panos (1969) in a four-year longitudinal study of freshman college students.

The first step in this procedure was to select those variables which differentiated between the respondent and the non-respondent families. This was accomplished by a stepwise linear regression in which the dependent variable was a dummy variable indicating attrition. Astin and Panos then crosstabulated those items which carried the largest weights in the regression analysis. Subjects were sorted into cells on the basis of these variables and the percentage of respondents in each cell was determined.

The corrective weights used were the reciprocal of the proportion of respondents in a given cell in the cross-tabulation. Thus, if the proportion of respondents in a cell was .5, the weight for a respondent in what cell would be 1/.5 or 2. In other words, if the number of nonrespondents equalled the number of respondents classified in this cell, the respondents would be counted twice. Similarly, for a cell in which there were twice as many nonrespondents as respondents, the respondents in that cell would be weighted by a factor of three in the final analysis, once for themselves and twice more for the nonrespondents with the same cell characteristics (i.e., 1/.333 = 3). Formally, the weight for the j^{th} cell can be defined by:

$$W_j = n_j/f_j,$$

where n_j represents the total number in the j^{th} cell and f_j represents the number of respondents in the j^{th} cell (i.e., f_j excludes the attriters).

These weights were then used to perform a weighted analysis. In the case of a continuous outcome variable, the weighted analysis is a special case of weighted least squares analysis.

2.1 Calculating the Attrition Weights

Table 2A.2-1 summarizes the interview histories by "Number of States Lived in Last Year" and "Experimental Status." "Number of States..." was found to be the strongest predictor of those families who received no follow-up interviews. Experimental status, though not strongly correlated with attrition, was selected because of its obvious theoretical importance. The attrition weights as listed in the last four columns of the table were calculated separately for each of the four interview periods.

These weights served two purposes. First, within a given interview period they served to make the mean outcome variables less biased by attempting to take into account the values of those families who were not interviewed. For example, the completer families who were interviewed at six months had mostly lived in only one state in the previous year (90 one-state families compared to 59 families who lived in more than one state). The noninterviewed completer families, however, mostly lived in more than one state (58 compared with 43). Thus, each interviewed family living in more than one state is counted as 1.98 families, whereas each one-state family is weighted only as 1.48.*

Secondly, the weights served to equate each interview period to the same base. Changes in means over time thus become more meaningful. Ideally, it might be expected that a plot of the weighted means over time would appear to show more of a smooth upward pattern than a plot of the unweighted means. The pattern might also be expected to appear similar to a plot of (unweighted) means for the subset of families receiving all four follow-up interviews. In both cases the base is constant throughout the five time periods (pre-Center, 6, 12, 18, and 24 month follow-up interviews).

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*These weights were standardized prior to the analysis in order to keep the degrees of freedom constant. The six month weights were reduced by a factor of 278/534; the 12-month weights by 242/534; etc.

Figure 2A.2-1
Calculation of Attrition Weights

	Number of States Lived in Last Year	n	Number Interviewed				Weights			
			6 mos.	12 mos.	18 mos.	24 mos.	6 mos.	12 mos.	18 mos.	24 mos.
Completers	1	133	90	64	50	27	1.48	2.08	2.66	4.93
	2 or more	117	59	47	31	13	1.98	2.49	3.77	9.00
Completer-Controls	1	15	8	10	10	4	1.875	1.50	1.50	3.75
	2 or more	15	8	12	9	8	1.875	1.25	1.67	1.875
Mid-Controls	1	22	8	16	10	9	2.75	1.375	2.20	2.44
	2 or more	25	15	17	12	11	1.67	1.47	2.08	2.27
Resignee-Controls	1	14	7	8	5	4	2.00	1.75	2.80	3.50
	2 or more	22	14	14	12	8	1.57	1.57	1.83	2.75
Resignees	1	87	37	32	22	18	2.35	2.72	3.95	4.83
	2 or more	84	32	22	17	12	2.625	3.82	4.94	7.00
Total		534	278	242	178	114				

The next section presents the results on three outcome variables in terms of: a) unweighted means, b) weighted means, and c) unweighted means for the subset of families receiving all interviews (repeated measures).

Since the effects estimated using attrition weights were somewhat different from the unweighted estimates, it is important to understand the nature of the attrition weights: they were only an attempt to estimate the effects that would have been found had all families been interviewed. If no variables were found to correlate with attrition, or the variables that were found to correlate with attrition were unrelated to the factors relevant to the outcome variables, the attrition weights would wash out, the weighted estimates reducing to the unweighted estimates.

3.0 Longitudinal Analyses: Unadjusted, Attrition-Weighted and Repeated Measures

We have pointed out the existence of a high rate of attrition from the follow-up interview stream in the Follow-up Study. It was possible that this attrition could cause severely biased estimates of program effects unless it was dealt with in an appropriate manner. On the other hand, since there was a wide range of very different reasons for attrition, it was also possible that the attrition from the Follow-Up Study interview stream was not introducing a significant amount of bias into our estimates of program effects.

The questions of whether or not the Follow-Up Study suffers from bias due to attrition, and if so, how best to deal with it, were two critical issues that had to be addressed. We identified three different probable approaches to conducting longitudinal (and, implicitly, cross-sectional) analyses of program effects:

- Repeated measures analyses, in which we used only those families/persons for whom we had a specified set of consecutive interviews.

  This increases the rate of attrition (and thereby the potential degree of bias) over the next approach.

- Unadjusted analyses of means at each interview point, employing in the computation of means at each interview point all families/persons for whom we happen to have interviews.

This procedure makes no adjustment for attrition, but uses all available interviews.

- Attrition-weighted analyses, which employ all the interviews available (as in the preceding procedure) but weight them using the procedure discussed in Section 2.0 above to reflect the total population.

In the rest of this chapter we present the results of these three types of analyses when each was conducted on the same outcome measures. For convenience, we selected three outcome measures relating to the male HOH for these analyses: mean monthly employment income, number of weeks unemployed, and occupational prestige. Note that these attrition studies were performed on data cases available at the time, representing a subset of the total study sample. Since all n's were extremely small in the 24 month data, we present only the results through the 18 month follow-up.

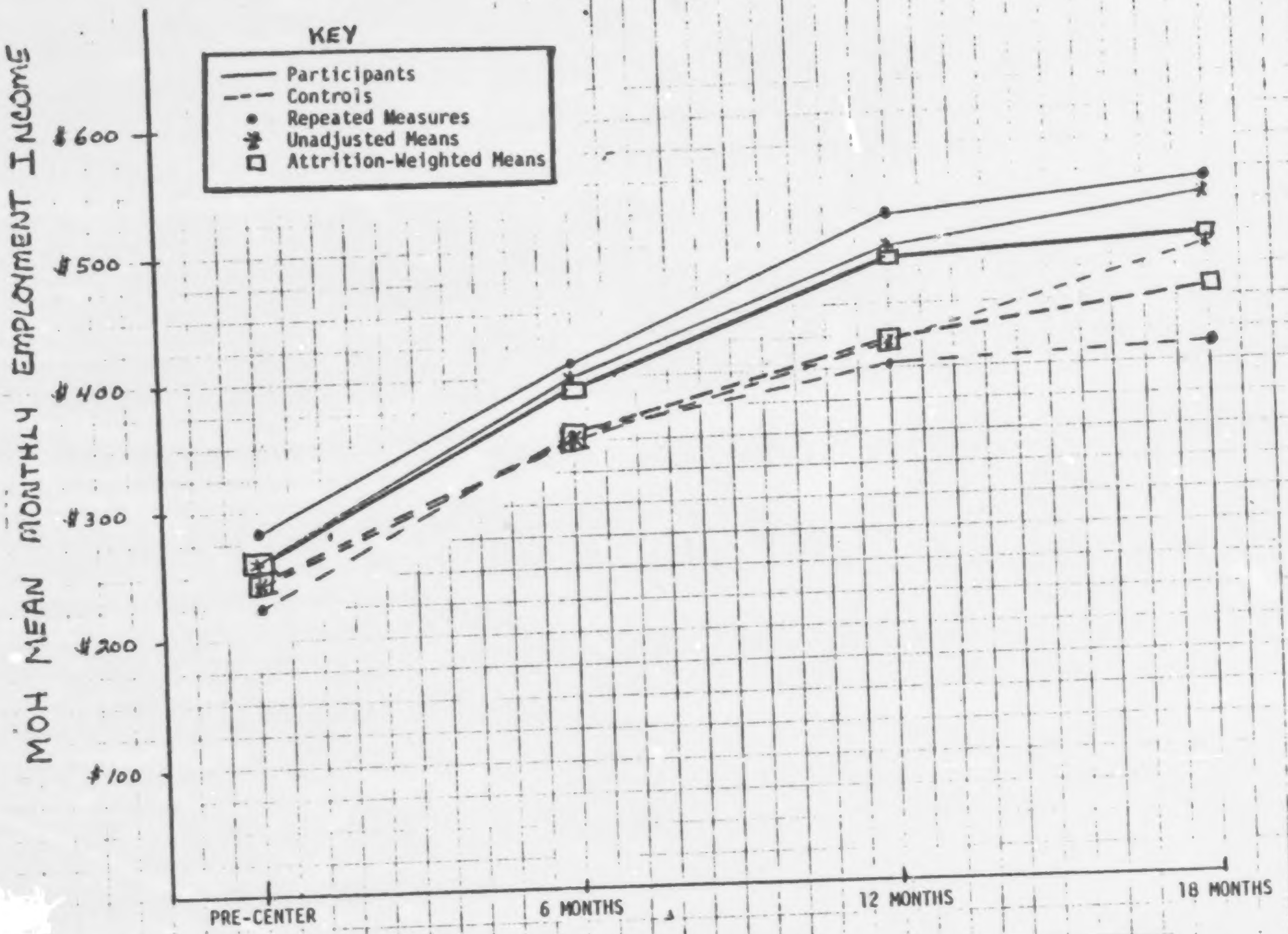
3.1 Participant vs. Control Comparisons on Employment Income

Figure 2A.3-1 presents the participant-control comparisons of mean average monthly employment income using three different methods to compute the means. These comparisons are given separately by completers and non-completers with their respective control groups in Figures 2A.3-2 and 2A.3-3.

First, notice the clear upward trend in income for all groups. Next, notice that the means plotted in Figure 2A.3-2 for the completers and completer-controls were definitely larger than the average income of the non-completers and non-completer controls at all points in time regardless of the three methods used to compute the means.

Recall that the unweighted means were based on different sets of respondents in each interview period. Weighting for attrition adjusted these means to a common base. The adjustment was noticeably small in all three graphs.

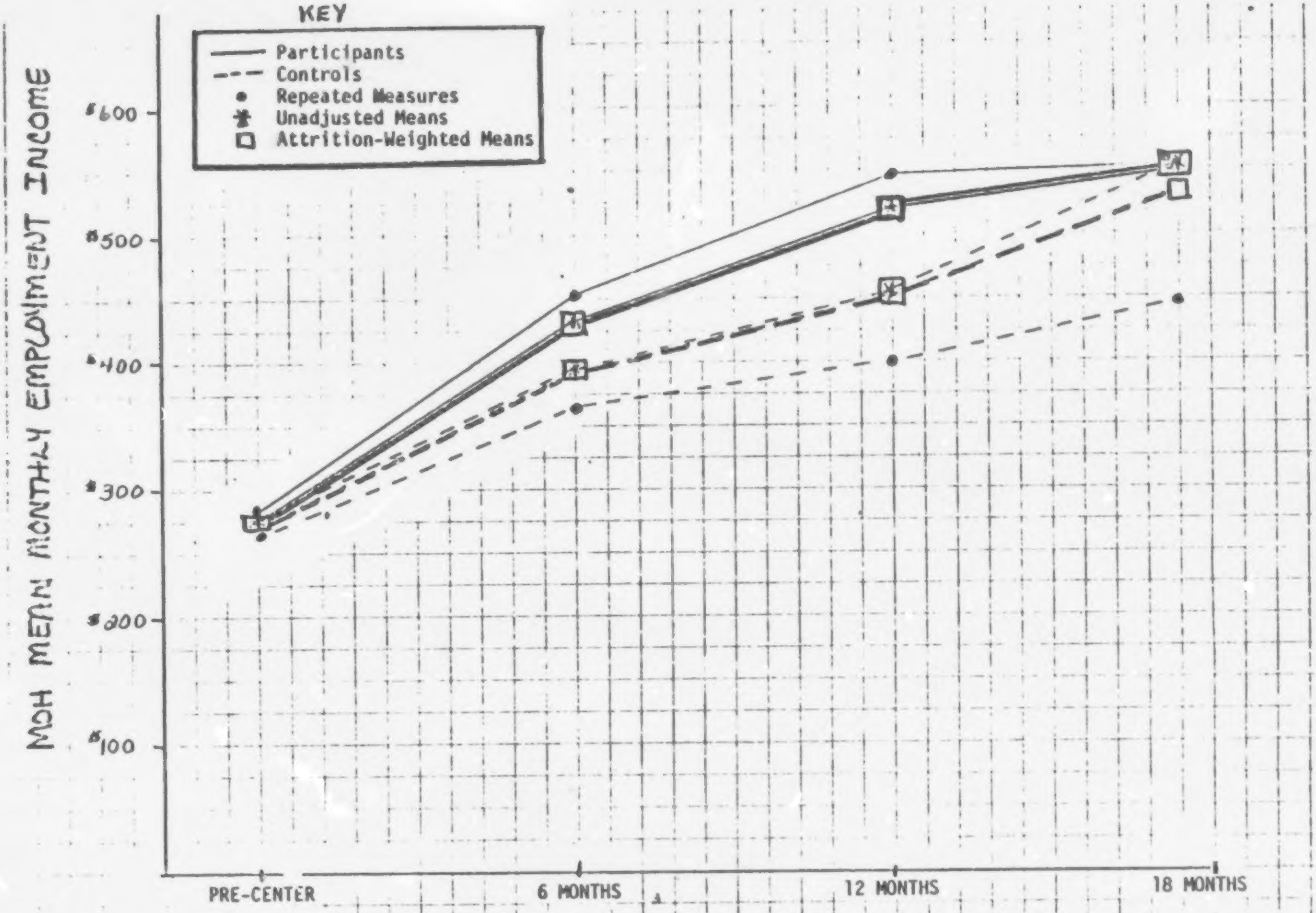
Next, as a test of whether the attrition weights were in fact adjusting to a common base, we compared the weighted means with the means obtained from the repeated measures class of families. This latter set of families was a subset who had received all four follow-up interviews. (The difference in sample sizes over time for this group was due to item non-responses or a change in classification of HOH over the period of this study.)



Repeated Measures	Participant	(n = 63)	(n = 58)	(n = 60)	(n = 64)
	Control	(n = 31)	(n = 30)	(n = 31)	(n = 31)
Unadjusted & Attrition Weighted	Participant	(n = 357)	(n = 170)	(n = 128)	(n = 95)
	Control	(n = 81)	(n = 44)	(n = 53)	(n = 42)

Figure 2A.3-1

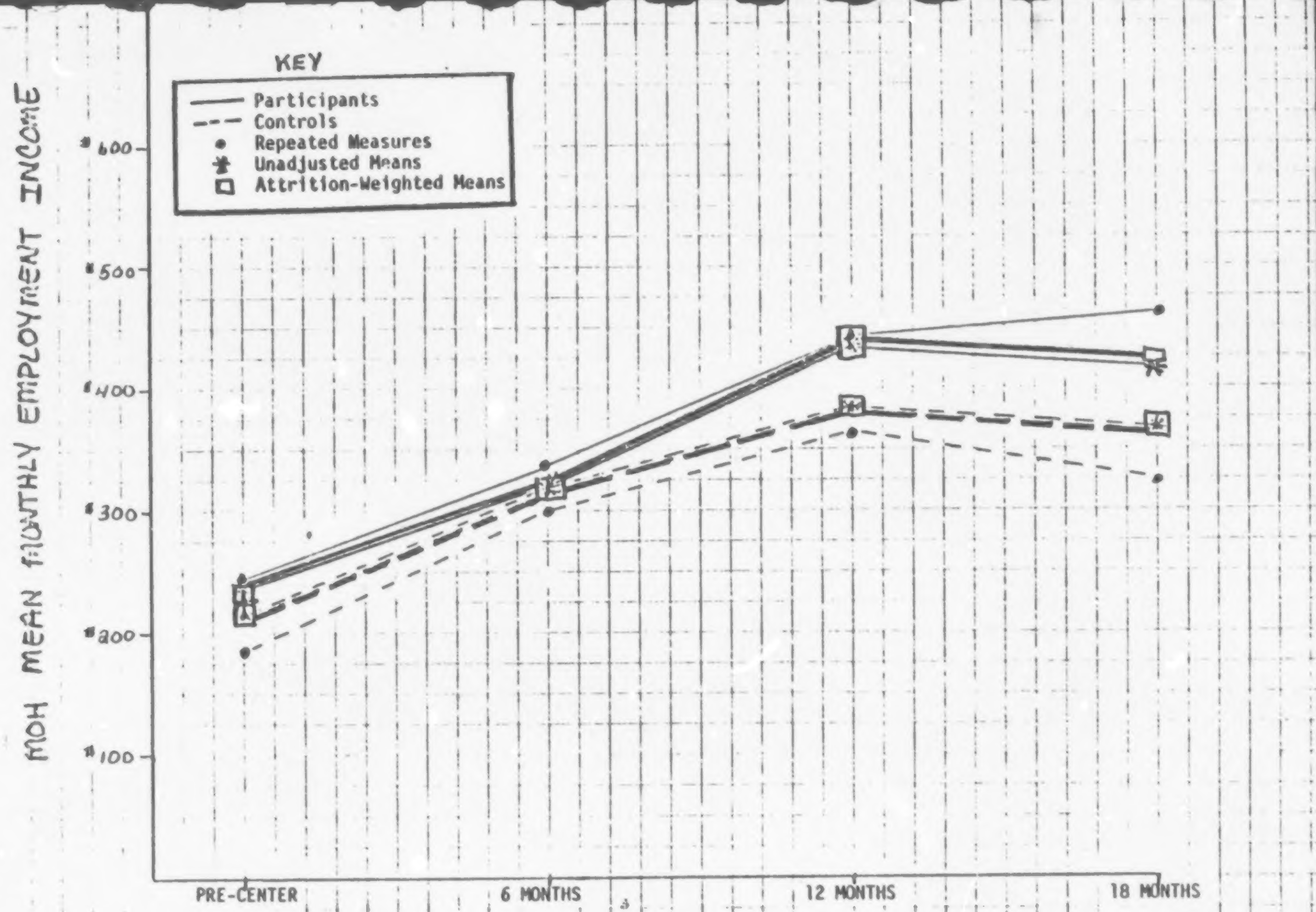
MOHs' Mean Monthly Employment Income:
All Participants/All Controls at Pre-Center, and 6, 12, and 18 month Follow-Ups
by Repeated Measures, Unadjusted and Attrition-Weighted



Repeated Measures	Participant	(n=43)	(n=37)	(n=41)	(n=44)
	Control	(n=20)	(n=21)	(n=22)	(n=20)
Unadjusted & Attrition Weighted	Participant	(n= 205)	(n= 116)	(n= 86)	(n= 64)
	Control	(n= 52)	(n= 31)	(n= 39)	(n= 29)

Figure 2A.3-2

MOHs' Mean Monthly Employment Income for Completers/Completer Controls at Pre-Center, and at 6, 12, and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted



Repeated Measures	Participant	(n=20)	(n=21)	(n=19)	(n=20)
	Control	(n=22)	(n=20)	(n=21)	(n=21)
Unadjusted & Attrition Weighted	Participant	(n= 152)	(n= 54)	(n= 42)	(n= 34)
	Control	(n= 61)	(n= 31)	(n= 36)	(n= 27)

Figure 2A.3-3

MOHs' Mean Monthly Employment Income for Non-Completers/Non-Completer Controls at Pre-Center, and 6, 12, and 18 Month Follow-Ups by Repeated Measures, and Attrition-Weighted

The repeated-measure families in Figure 2A.3-1 show a very smooth upward trend, the gap between participants and controls growing slightly over time. One might have expected to find a rather smooth curve when there was a common base of families if the economy in general remained somewhat constant over this period. On the other hand, large jumps in the curve might have been expected if the subset of families upon which the different means were based changed substantially over time.

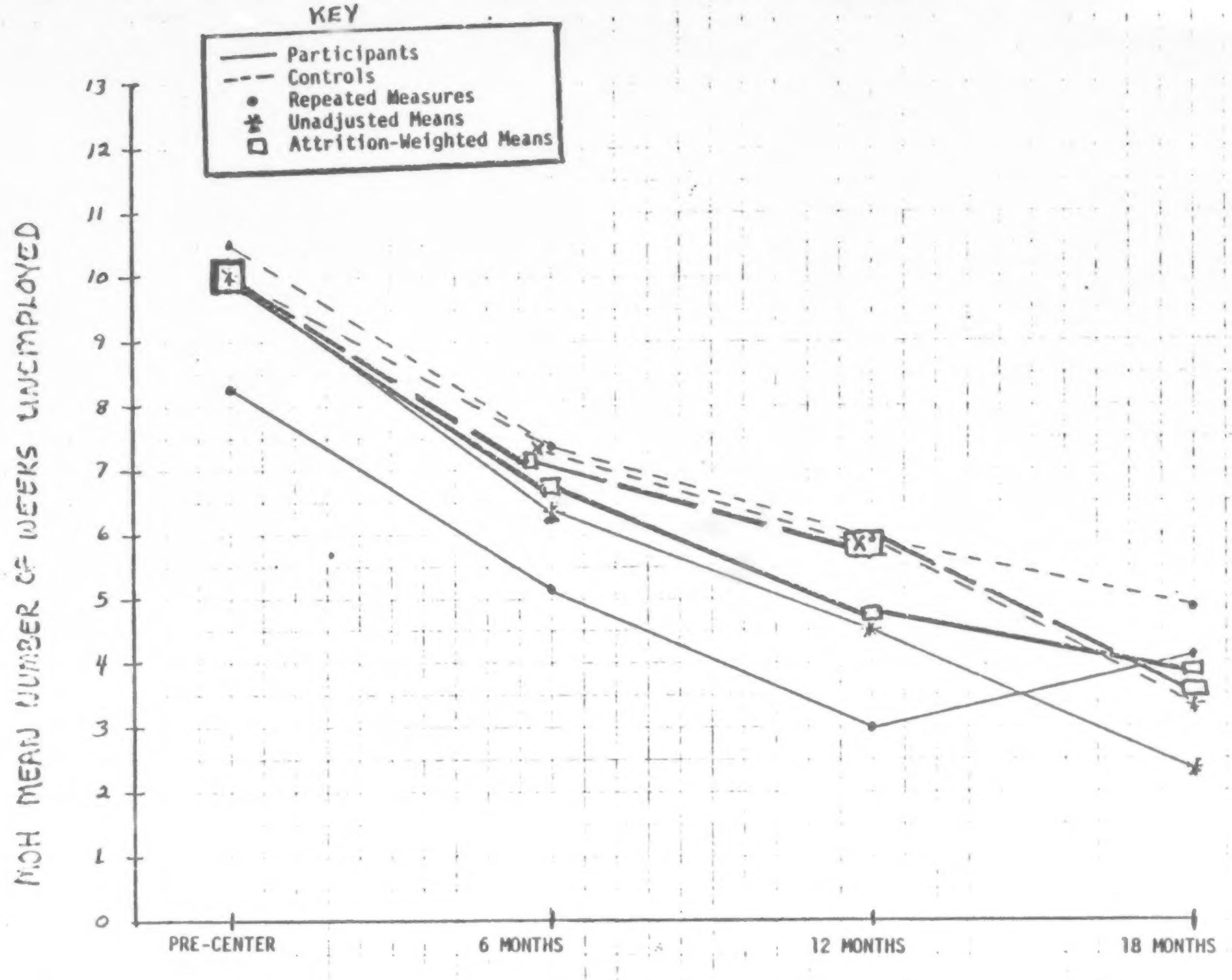
The attrition weighted means also formed a reasonably smooth upward trend and hence were supportive of the hypothesis that they did in fact adjust the unweighted means to a common base. On the other hand, the fact that the weighted means were not much different than the unweighted means lent doubt to the assumption that the attrited families were substantially different, with respect to factors relevant to the outcomes, from the families interviewed.

3.2 Participant vs. Control Comparisons on Unemployment

Next, we turned our attention to the reported number of weeks unemployed in the previous six months. The three sets of comparisons are presented in Figures 2A.3-4 through 2A.3-6 for all participants, completers and non-completers, respectively.

First, notice the general downward trend exhibited in all three graphs with the single exception of the repeated-measures participant families. After reducing the number of weeks unemployed to an average of three weeks at the time of the 12-month interview (two weeks for the completers), these families found their jobless days increasing somewhat in the following six months. The completers and completer-controls showed substantially less unemployment than the non-completers. The completers also showed less unemployment than the completer-controls, while the non-completers performed about the same as their control group.

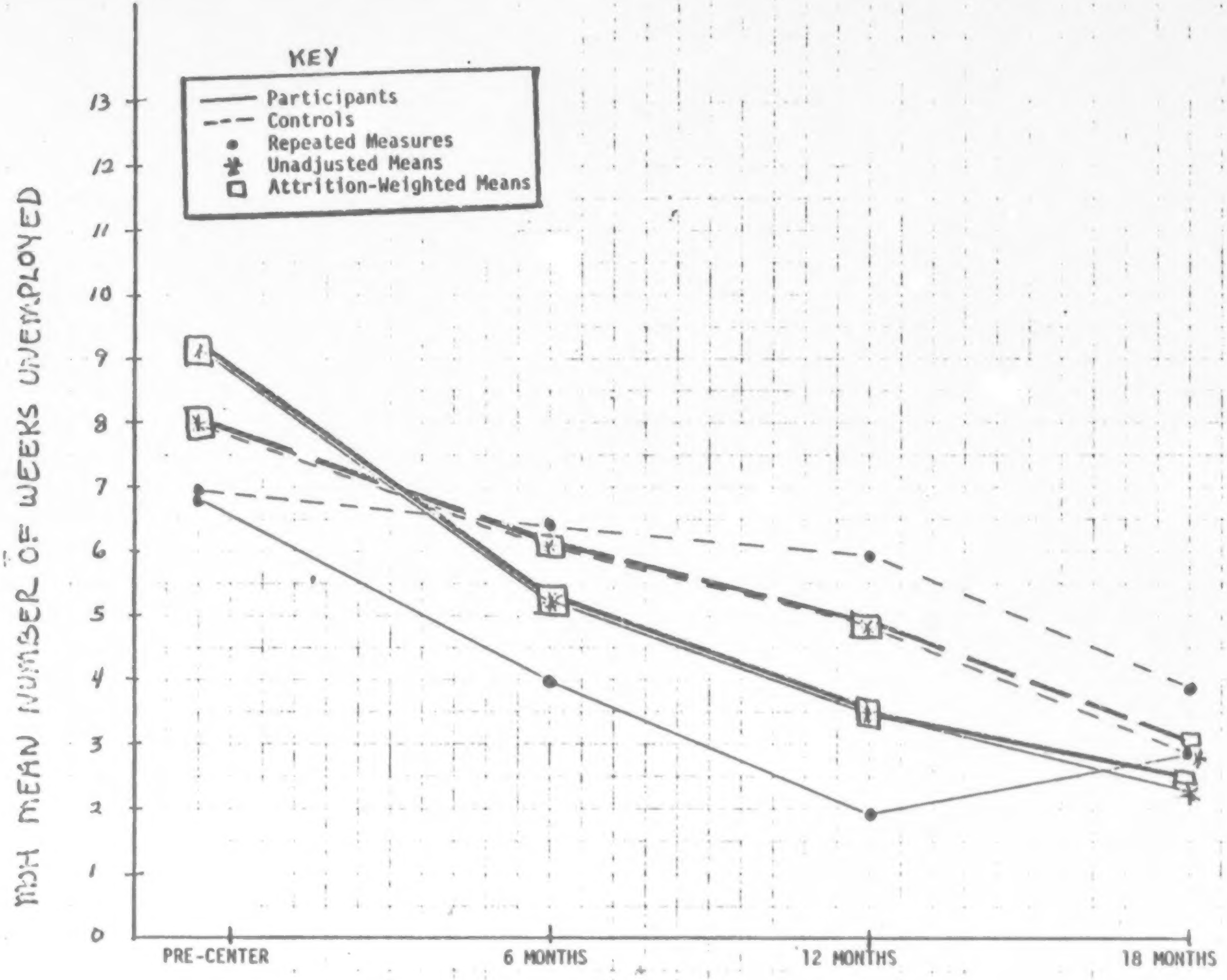
Again, the pattern exhibited by the weighted means was not only similar to that of the repeated-measures families, but also extremely similar to the unweighted means.



Repeated Measures	Participant	(n=63)	(n=63)	(n=63)	(n=65)
	Control	(n=31)	(n=33)	(n=34)	(n=33)
Unadjusted & Attrition Weighted	Participant	(n= 357)	(n= 119)	(n= 134)	(n= 97)
	Control	(n= 81)	(n= 48)	(n=57)	(n= 44)

Figure 2A.3-4

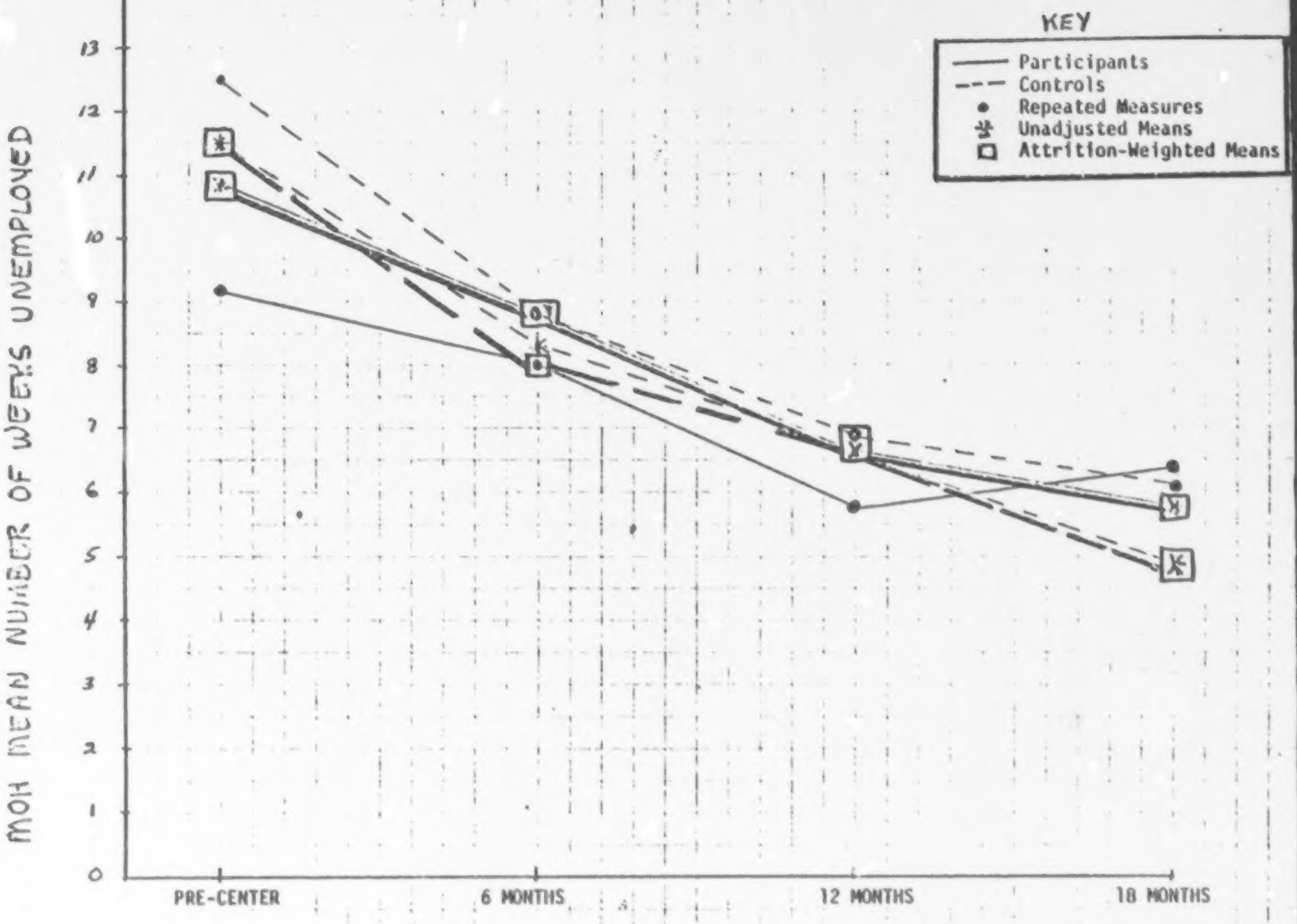
MOHs' Number of Weeks Unemployed for All Participants/All Controls at Pre-Center and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted



Repeated Measures	Participant	(n=43)	(n=42)	(n=43)	(n=44)
	Control	(n=20)	(n=22)	(n=22)	(n=21)
Unadjusted & Attrition Weighted	Participant	(n=206)	(n=120)	(n=90)	(n=65)
	Control	(n=53)	(n=32)	(n=40)	(n=30)

Figure 2A.3-5

MOHs' Number of Weeks Unemployed for Completers/Completer-Controls at Pre-Center, and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted



Repeated Measures	Participants	(n=20)	(n=21)	(n=20)	(n=21)
	Controls	(n=22)	(n=23)	(n=24)	(n=23)
Unadjusted & Attrition Weighced	Participant	(n=158)	(n=58)	(n=44)	(n=32)
	Controls	(n=61)	(n=36)	(n=40)	(n=29)

Figure 2A.3-6

MOHs' Number of Weeks Unemployed for Non-Completer/Non-Completer Controls at Pre-Center, and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted

Also, notice that the differences between the participants and controls was largest with respect to the repeated-measures families. This might be related to the possibility that these families had the most stable life situations (since they are easiest to locate for an interview), and possibly were susceptible to the influence of the program. If this were true, the repeated-measures families constituted a biased subset of all families in the study in that they were less mobile, more cooperative, etc. If so, either the weighted or unweighted means associated with all families would have been most representative of all participants.

3.3 Participant vs. Control Comparisons on Occupational Status

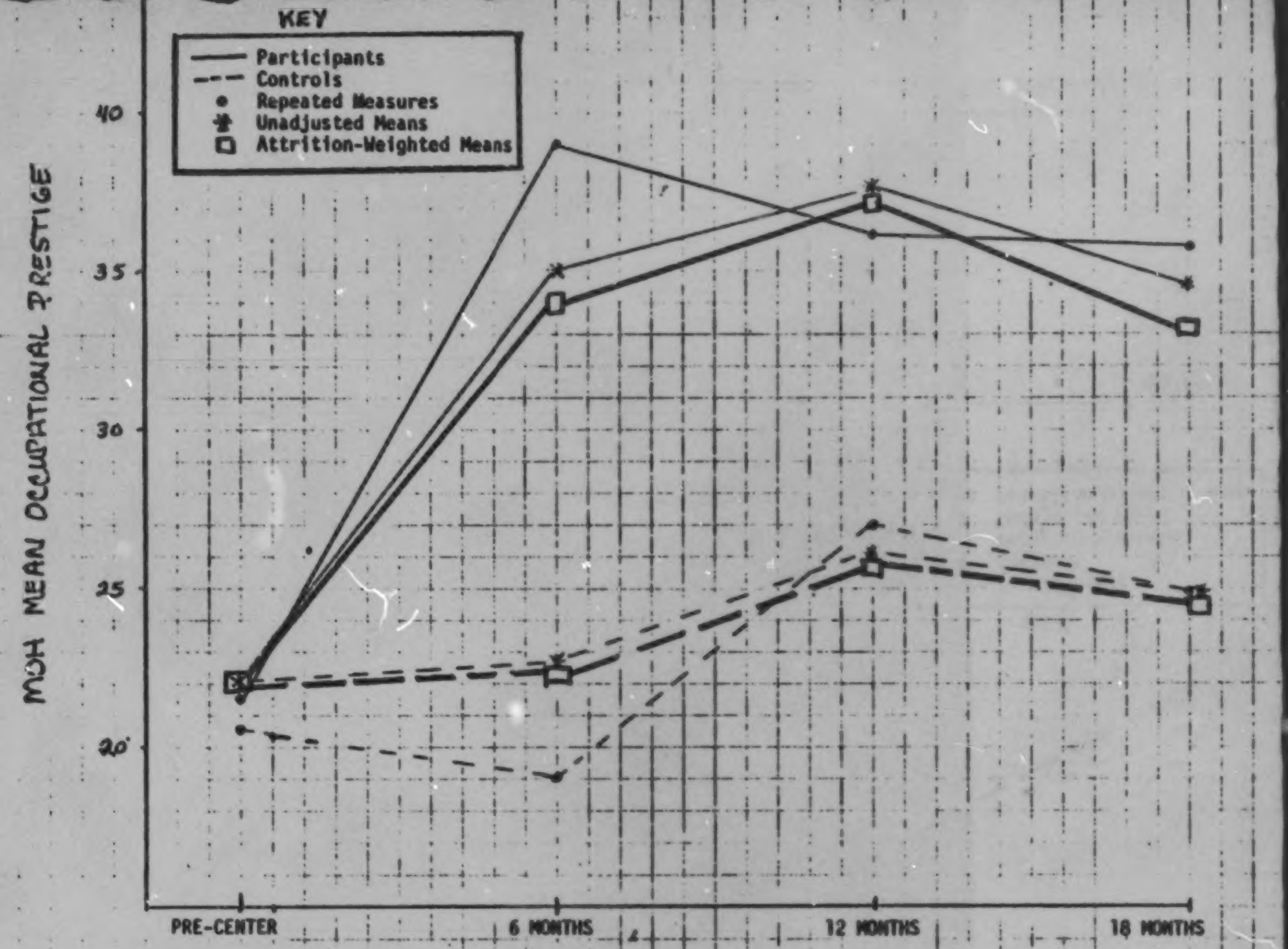
The three sets of participant-control comparisons regarding occupational status are presented in Figures 2A.3-7 through 2A.3-9. The participants and controls (at pre-Center) were very similar on occupational status, but moved quickly apart after six months. The difference was most apparent for those completing the program. Each of the three methods of summarizing the means showed this difference to persist throughout the 18 months following the program.

Again, the differences between the weighted and unweighted means were slight.

4.0 Findings and Conclusions Regarding Weighting for Attrition, Repeated Measures Analyses, and Ignoring the Attrition Problem

In view of the attrition problem in the Follow-up Study, this study was undertaken to conduct an empirical exploration of the relative merits of three different ways of analyzing the effects of the Mountain-Plains program:

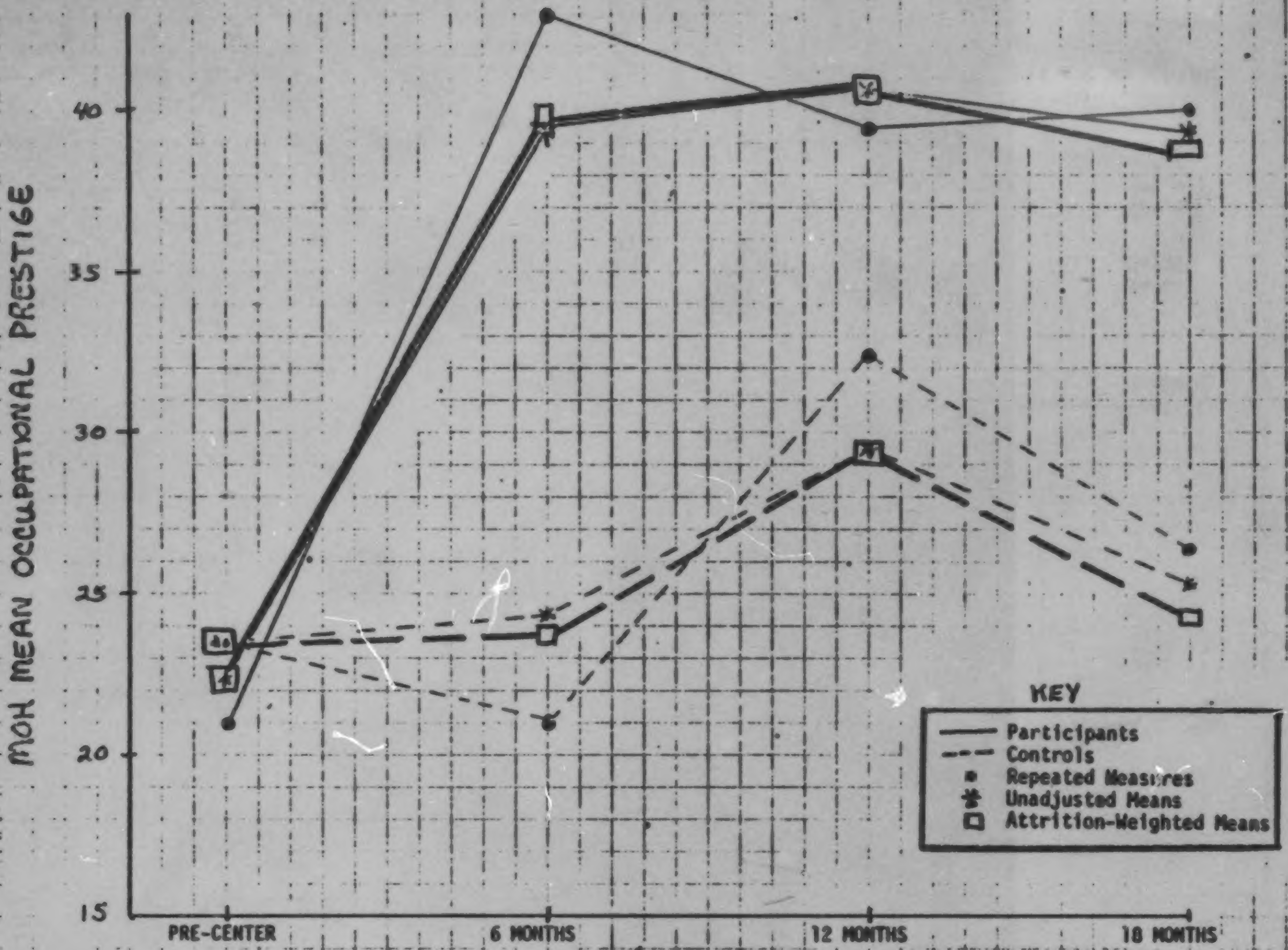
- Selecting the subset(s) of families/persons for whom we have some specified set of consecutive interviews;
- Using all families/persons for whom we have a specified interview type (6, 12, 18 or 24 month follow-up), and weighting their responses to reflect the attrition situation; and
- Using all families/persons for whom we have a specified follow-up interview, without weighting their responses to take attrition into account.



Repeated Measures	Participant	(n=62)	(n=63)	(n=62)	(n=64)
	Control	(n=31)	(n=32)	(n=32)	(n=33)
Unadjusted & Attrition Weighted	Participant	(n= 367)	(n= 176)	(n= 133)	(n= 96)
	Control	(n= 81)	(n= 46)	(n= 56)	(n= 44)

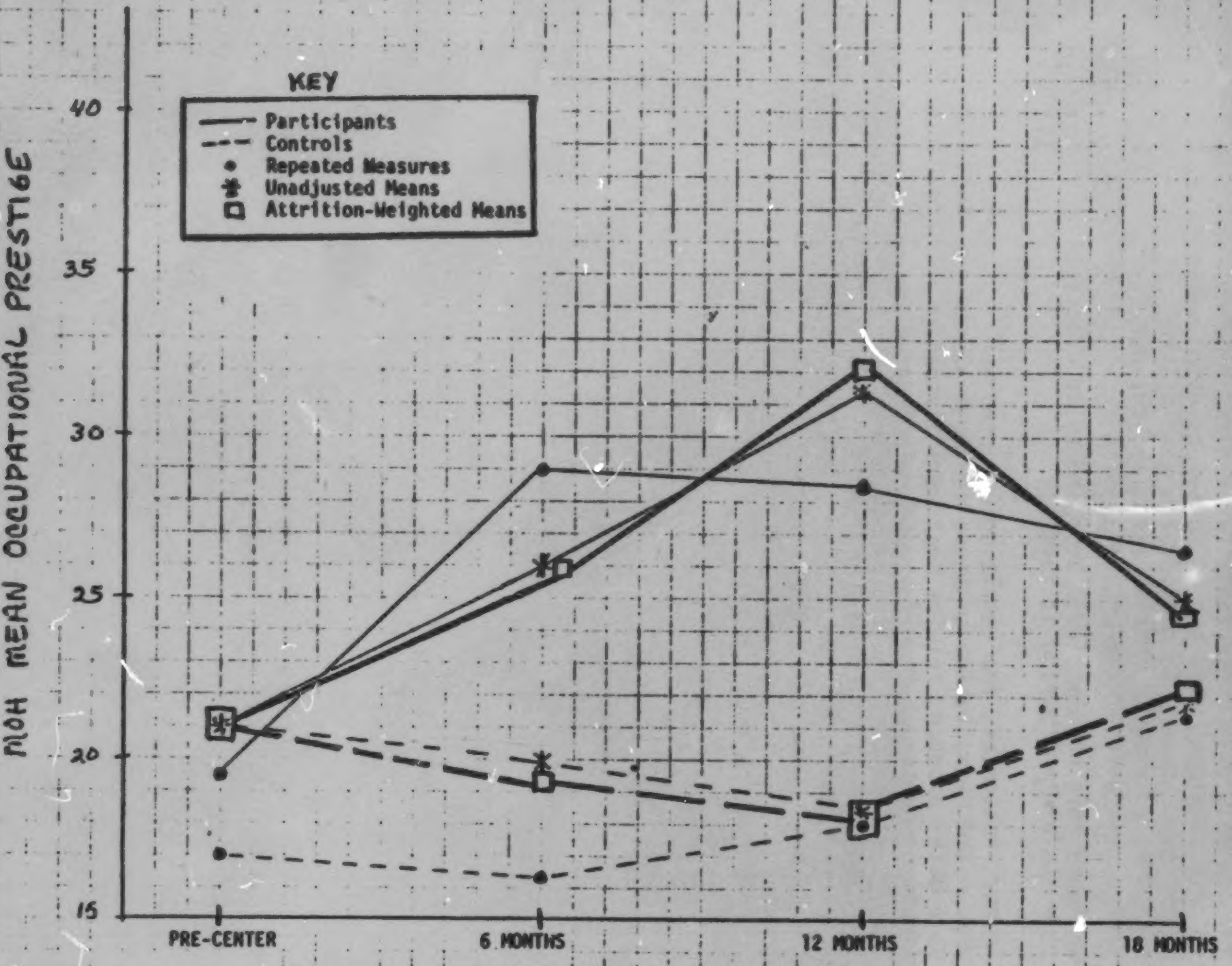
Figure 2A.3-7

MOHs' Occupational Prestige for All Participants/All Controls at Pre-Center and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted



Repeated Measures	Participant	(n=43)	(n=42)	(n=43)	(n=44)
	Control	(n=20)	(n=22)	(n=21)	(n=21)
Unadjusted & Attrition Weighted	Participant	(n= 205)	(n= 120)	(n= 90)	(n= 65)
	Control	(n= 53)	(n= 32)	(n= 28)	(n= 30)

Figure 2A.3-8
MOHs' Occupational Prestige for Completers/Completer Controls at Pre-Center, and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted



		PRE-CENTER	6 MONTHS	12 MONTHS	18 MONTHS
Repeated Measures	Participant	(n=22)	(n=21)	(n=19)	(n=20)
	Control	(n=19)	(n=22)	(n=23)	(n=23)
Unadjusted & Attrition Weighted	Participant	(n= 152)	(n=58)	(n=43)	(n=31)
	Control	(n= 61)	(n=33)	(n=38)	(n=21)

Figure 2A.3-9

MOHs' Occupational Prestige for Non-Completers/Non-Completer Controls at Pre-Center and 6, 12 and 18 Month Follow-Ups by Repeated Measures, Unadjusted and Attrition-Weighted

In conducting these comparative analyses, we used three critical outcome measures and one system of weighting for attrition suggested by the work of Astin and Panos (1969). In general, these are our findings:

- A repeated measures approach, in which we select for analysis only those families/persons for whom we have some specified set of consecutive follow-up interviews, appears to provide the most biased estimates of program impacts (usually, but not always, in favor of the program).

  We found this highly biased approach to be unacceptable and did not pursue it further.

- In most instances, the attrition-weighted and unadjusted means (which both use the most available data) produced results that were virtually identical (although they frequently differed from the results obtained by the repeated measures approach). In the analyses presented in this section, in no instance (with the possible exception of number of weeks unemployed for MOHs at 18 month follow-up for the all participant/all control comparisons) was a difference between the attrition-weighted and unadjusted point estimates sufficiently large to be considered meaningful from a substantive, pragmatic point of view. Essentially, the attrition-weighted and unadjusted analyses seemed to produce the same estimates of program effects.

Since it was true that the attrition-weighted and unadjusted procedures provide essentially the same portrayal of program effects, there was little reason for us to pursue the weighting procedure (even if weighting technically/theoretically provides a less biased estimate), as it consumed a great deal of limited resources.

As dramatic as attrition may seem, however, it is entirely possible that attrition in the Follow-Up Study was due to so many different types of factors that meaningful bias in estimates of program effects was not caused by attrition. In our explorations of weighting for attrition, we found empirical evidence that weighting caused nil or trivial changes in the estimates of program effects. Therefore, analyses for the final report were conducted using the unweighted means based on those families/persons for whom we had observations at any specified follow-up point.

APPENDIX III-C

MOUNTAIN-PLAINS' INTERVIEW PROTOCOL

MOUNTAIN-PLAINS' INTERVIEW PROTOCOL

The Mountain-Plains Follow-Up Study utilized four interview protocols to obtain the data for the study: the Mountain-Plains pre-Center Interview Protocol, the Mountain-Plains Follow-Up Interview protocol, the Abt Associates Follow-Up Interview Protocol and the Abt Associates Personal Supplement to the Follow-Up Interview Protocol.

Only the Mountain-Plains pre-Center Interview protocol is presented in this appendix because their Follow-Up Interview protocol is virtually identical to the pre-Center form.

The Abt Associates instruments are presented in Appendix III-D.

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW AFB, MONTANA 59231 TEL (406) 524-6221

APPLICATION FOR PROGRAM ADMITTANCE

1. NAME OF APPLICANT and ADDRESS

2. PHONE

HOME: ____ ____
WORK: ____ ____
OTHER: ____ ____

3. MARITAL STATUS

____ Married ____ Divorced
____ Single ____ Separated
____ Widow(er)

4. MEMBERS OF HOUSEHOLD OR DEPENDENTS ACCOMPANYING APPLICANT (INCLUDING APPLICANT).

NAME	SEX	BIRTHDATE	RELATIONSHIP	SOCIAL SECURITY NO.	EDUCATION COMPLETED
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

5. PLEASE FILL IN THE FOLLOWING IN THE SPACES PROVIDED.

1. ____________ Indicate total payments due from you and all individuals listed on this application form during the next 12 months (dollars). Do not count rents, electricity, heat, etc. Do include car payments, insurance, television, household goods.
2. ____________ Are you or any individual listed on this application an alcoholic? (Answer Yes or No)
3. ____________ Are you or any individual listed on this application a habitual drug user? (Answer Yes or No)
4. ____________ Are you a citizen of the United States? (Answer Yes or No)
5. ____________ Are you or any individual listed on this application presently on parolee or probation status? (Answer Yes or No)
6. ____________ Do all persons age 6 and above listed on this application speak, read and write the English language?
7. ____________ If selected to participate in the Mountain-Plains Program, would you be willing to move to Glasgow, Montana? (Answer Yes or No)
8. ____________ Does any member of your family have any disability such as blindness, deafness, mental retardation, or is confined to a wheel chair? If yes, list family member and disability. ____________________

I declare that my answers to all the above questions and statements are true and correct to the best of my knowledge and belief. I understand that I can be disqualified from participation in the Mountain-Plains Education and Economic Development Program, Inc. for making a false statement or for misrepresenting any material fact on this application.

____________ Date ____________________ Signature of Applicant

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL. (406) 524-6221

Family Name: ____________________

EDUCATION

1. **Highest grade completed in school?**

Head of Household ______ Spouse ______ H.S. Dropout - Dependent ______

2. **Has he/she ever taken a GED test?**

Head of Household ______ Spouse ______ H.S. Dropout - Dependent ______

If yes, list below the place test was taken.

PLACE	FAMILY MEMBER

3. **What are the WRAT scores?**

	Math	Reading
Head of Household		
Spouse		

4. **Has he/she participated in any vocational and/or training programs?**

Head of Household ______ Spouse ______ H.S. Dropout - Dependent ______

If yes, please list those attended in the past 5 years.

Name of School	Address	Type of Training	from Dates Attended to	Completed?	Family mem.

5. **Is the head of household a veteran? Yes ______ No ______**

If yes, complete the following section:

Date of entry into military service: ______________ Is he eligible for veteran's benefits? ______

Date of separation from military service: ______________ If yes, has he used any yet? ______

Type of Discharge: ______________

Please describe below any specialty skills, special school or training completed at time of separation.

____

____

____

6. **What grades are the children in now or going to be in when school begins?**

NAME	GRADE	NAME	GRADE	NAME	GRADE

(Attach school records to this form for all children and for adults if available.) (Attach GATB score cards to this form for head of household and spouse.)

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL (406) 524-8221

FAMILY NAME ____________________

EMPLOYMENT HISTORY

7. Head of Household Employment History of Past 3 Years *(List current or last job first)*

EMPLOYER	ADDRESS	KIND OF BUSINESS	DATE OF EMPLOYMENT From	To	JOB TITLE	SALARY	REASON FOR LEAVING	Full or Part Time

8. Spouse – Employment History of Past 3 Years *(List current or last job first)*

EMPLOYER	ADDRESS	KIND OF BUSINESS	DATE OF EMPLOYMENT From	To	JOB TITLE	SALARY	REASON FOR LEAVING	Full or Part Time

9. Is head of household presently: ___employed or ___unemployed. (If unemployed, is he/she looking for work? ________)

For how many weeks of the past 12 months, if any, were you unemployed? ____________________

10. Is spouse presently: ___employed or ___unemployed. (If unemployed, is he/she looking for work? ______)

For how many weeks of the past 12 months, if any, were you unemployed? ____________________

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL: (406) 524-6221

Family Name: ______________________________

FINANCIAL DATA

11. What is the family income from employment only over the past 12 months? ______________

12. Has the family received any welfare benefits during the past 12 months? Yes ___ No ___

If yes, put the total amount received over the past 12 months across from the appropriate type:

County (general) assistance _ _ _ ________
Old Age assistance _ _ _ _ _ _ ________
Aid to the Blind _ _ _ _ _ _ ________
Medical _ _ _ _ _ _ _ _ _ _ ________
Other (Specify) _ _ _ _ _ _ _ ________

Child Care _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ ________
Aid to the Permanently or Totally Disabled _ ________
Aid to Families with Dependent Children _ _ ________
(Amount per month ________ **)**

13. Has the family received any unemployment compensation in the past 12 months? Yes ___ No ___

If yes, what is the total amount? __________

14. Does the family have any other sources of income? Yes ___ No ___

If yes, what kind of income? ______________ **How much over a year's time?** ______________

15. Has the family used any of the following in the past 12 months?

___ **Food Stamps (If yes, how much is paid for stamps monthly?** ________ **)**
___ **Commodities**
___ **Free School Lunch**

16. Does the family have any investments? Yes ___ No ___

If yes, what? ____

17. What is the gross amount of debts payable over the next 12 months? ______________

18. Does family have savings account? ________

If yes, has it grown or decreased in the past 12 months? ______________

19. Does the family have medical insurance? ______________

20. Do adults have life insurance? Head of household ________ **Spouse** ________

21. Does the family own a car? ______________

If yes, do they have adequate insurance coverage? ______________

22. Do you use a family budget? Yes ___ No ___

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL: (406) 524-6221

Family Name: ______________

SOCIOLOGICAL INFORMATION

23. Are all persons listed on the application a legally constituted family? ______________

If not, explain: ______________

24. What community resources has any member of the family utilized in the past 3 years?

Agency	*Family Member*	*Purpose*

(Make every effort to obtain completed Agency Report Form from those agencies listed above.)

25. Is there a criminal or court suit pending against any family member? Yes___ No___

(Attach Police/Court check)

26. Does family belong to any community organization? HOH ________ Spouse ________

If yes, please name. ______________

27. Does either adult hold office in any of these organizations? HOH ________ Spouse ________

28. In the past month has the family devoted any of its time to volunteer activities within the community? (Boy Scouts, Girl Scouts, Little League, clean-ups, etc.) HOH ________ Spouse ________

29. Has the family been involved during the past year in contacting public officials in an attempt to improve the conditions of their community? HOH ________ Spouse ________

30. Have you voted in the past year? HOH ________ Spouse ________

31. Does the family participate in any recreational activities together? Yes No

32. Does the family ____own, ____rent, their own housing or ____live with relatives or friends.

Does the family live in government subsidized housing? ______ What is the value of the subsidy? ____________

33. What is the housing payment per month? ____________

34. What are their utility costs per month? ____________

35. How many rooms do they have (not including the bathroom)? ____________

36. Do any children over the age of 5 sleep in the parents' bedroom? ____________

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL: (406) 524-8221

Family Name:

37. Do they have an indoor flush toilet? ________

38. Do they have a telephone? ________

39. House Type (Check One)

__ (1
__ (2
__ (3
__ (4
__ (5
__ (6
__ (7

40. Dwelling Area (Check One)

__ (1
__ (2
__ (3
__ (4
__ (5
__ (6
__ (7

41. List below the cities and state family has lived in during the past 5 years:

City and State	*From When to When*

42. Does the family take a newspaper? ________

43. Does the family take a magazine? ________

44. Does the family have a "family doctor"? ________

45. Does the family feel that any of their members need health services at the present time? ________

If yes, what type of services:

__ Dental
__ Optical
__ Medical
__ Psychological/Mental Health

46. Are any family members of a racial minority? ________

If yes, which minority and how many family members? ________

Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 GLASGOW, MONTANA 59231 TEL. (406) 524-6221

APPLICANT'S FINANCIAL STATUS REPORT

APPLICANT ______________________ STATE ______________________

ADDRESS ______________________ INTERVIEWER'S NAME ______________________

TYPE OF DEBT	AMOUNT	DATE & AGENCY CONTACTED	TERMS & RATE OF PAYMENT	Date of Last Payment	COMMENTS	Interviewer's Initials
Hospital						
Doctors						
Pharmacies						
Utilities						
Legal						
Past Rent/House Payments						
Automobile (Include Title Check)						
Appliances						
Former Employers						
Finance Companies						
Bank Loans						
Personal Loans (Friends, etc.)						
Local Gas Stations						
Local Grocery Stores						
Recreation Equipment						
Other (Specify)						

I certify that to the best of my knowledge no members of my immediate family nor I have any additional debts

I certify that to the best of my knowledge this information is reasonably accurate

______________________ (Applicant's Signature)

______________________ (Date)

______________________ (Interviewer's Signature)

______________________ (Date)

APPENDIX III-D

ABT ASSOCIATES' INTERVIEW PROTOCOL AND PERSONAL SUPPLEMENT

ABT ASSOCIATES FOLLOW-UP INTERVIEW PROTOCOL AND PERSONAL SUPPLEMENT

Several pages have been deleted from the Abt Follow-Up Interview protocol: pages 7 through 12 were deleted because they duplicated pages 2 through 6 for additional members of the household; pages 35 through 41 and pages 48 through 56 were deleted because they duplicated questions asked about Job 1 for Jobs 2 and 3 for the man of the house and the woman of the house.

The Personal Supplement follows the Interview Protocol.

Abt Associates Inc.
55 Wheeler Street
Cambridge, Massachusetts 02138

OMB Number 051-R1099
Expires: 30 September 1976

FOLLOW-UP STUDY of the MOUNTAIN-PLAINS EDUCATION AND ECONOMIC DEVELOPMENT PROGRAM

PARTICIPANT AND CONTROL GROUP FAMILIES

Family ID # ☐☐☐☐ (01-04)

Interview Type

6 month 06 (05-06)
12 month 12
18 month 18
24 month 24

START CARD 01 (07-08)

MP STATUS

MOH – Completer 1 (09)
MOH – Resignee 3

WOH – Completer, JT 1 (10)
WOH – Completer, FCC . . . 2
WOH – Resignee 3

CALL RECORD

Attempt#	Date of Attempted Contact			Type of Contact*			Mileage	Outcome Code **	Interviewer ID#
	Mo.	Day	Year	P	L	T			
1				1	2	3			
2				1	2	3			
3				1	2	3			
4				1	2	3			
5				1	2	3			
	(11-12)	(13-14)	(15-16)					(17)	(18-20)

****Outcome Code**

1 = No contact
2 = Refusal
3 = Appointment made
4 = Interview incomplete (begun, but break-off before completion)
5 = Interview complete

*** Type of Contact**

P = Personal
T = Telephone
L = Letter

INTRODUCTION

Hello, I'm *(name of interviewer)* of Abt Associates, the research company that is now responsible for interviewing families after they have left the Mountain-Plains Program in Glasgow, Montana. As you remember, everyone who entered the Mountain-Plains Program agreed to be interviewed every 6 months after leaving the program. The purpose of the interviews is to find out how things have been going for you and your family since you left Mountain-Plains. I will be asking you about several of your experiences during the last 6 months – about the jobs you have had, how much it has cost you to live, the health of the members of your family, your income and your housing.

The whole interview will take about 1½ hours. Everything you say will be strictly confidential and no one other than the Abt Associates staff will ever be able to connect your name to your answers.

I would like to begin the interview by asking you about each of the people we have listed as members of your household the last time you were interviewed.

MEMBERS OF HOUSEHOLD AT LAST INTERVIEW

MEMBERS OF THE HOUSEHOLD AT LAST INTERVIEW	A-1 Is (PERSON) living with you in your (house/apartment) now?	A-2 When did (PERSON) leave?	A-3 Why did (PERSON) leave? (PROBE)	A-4 Has (PERSON) received any financial help from you since (he/she) moved out?
MAN OF THE HOUSE ____________ (first name) ____________ (last name) (21-22) ☐☐	(23-24) Yes ... 1→SKIP TO Q.A-7 No ... 2	(25-26) ☐☐ month 19 (27-28) ☐☐ year	(29-30) ____________ ____________ ____________ ____________ ____________	(31-32) Yes ... 1→SKIP TO Q.A-6 No ... 2
WOMAN OF THE HOUSE ____________ (first name) ____________ (last name) (71-72) ☐☐	(73-74) Yes ... 1→SKIP TO Q.A-7 No ... 2	START CARD 02 (09-10) ☐☐ month 19 (11-12) ☐☐ year	(13-14) ____________ ____________ ____________ ____________ ____________	(15-16) Yes ... 1→SKIP TO Q.A-6 No ... 2
Relationship to Head of Household ____________ (first name) ____________ (last name) (55-56) ☐☐ IF BLANK, SKIP TO Q.A-18 ON PAGE 13	(57-58) Yes ... 1→SKIP TO Q.A-7 No ... 2	(59-60) ☐☐ month 19 (61-62) ☐☐ year	(63-64) ____________ ____________ ____________ ____________ ____________	(65-66) Yes ... 1→SKIP TO Q.A-6 No ... 2
Relationship to Head of Household ____________ (first name) ____________ (last name) (35-36) ☐☐ IF BLANK, SKIP TO Q.A-18 ON PAGE 13	(37-38) Yes ... 1→SKIP TO Q.A-7 No ... 2	(39-40) ☐☐ month 19 (41-42) ☐☐ year	(43-44) ____________ ____________ ____________ ____________ ____________	(45-46) Yes ... 1→SKIP TO Q.A-6 No ... 2

A-5 Has your household received any financial help *from* (PERSON) since (he/she) moved out?	A-6 About how many dollars altogether since (he/she) moved out?	A-7 How old was (PERSON) on (his/her) last birthday? **(IF INFANT UNDER 12 MONTHS, RECORD "01", FOR ALL OTHERS RECORD AGE IN YEARS.)**	A-8 During the past 6 months, has (PERSON) needed any medical help or health care?
(33-34) Yes . . . 1 No . . . 2 → **SKIP TO NEXT PERSON**	(35-38) $ ☐☐☐☐ **SKIP TO NEXT PERSON**	(39-40) ☐☐ **years old**	(41-42) Yes . . . 1 No . . . 2 Don't Know . . 3 (2, 3) **SKIP TO Q.A-12**
(17-18) Yes . . . 1 No . . . 2 → **SKIP TO NEXT PERSON**	(19-22) $ ☐☐☐☐ **SKIP TO NEXT PERSON**	(23-24) ☐☐ **years old**	(25-26) Yes . . . 1 No . . . 2 Don't Know . . 3 (2, 3) **SKIP TO Q.A-12**
(67-68) Yes . . . 1 No . . . 2 → **SKIP TO NEXT PERSON**	(69-72) $ ☐☐☐☐ **SKIP TO NEXT PERSON**	(73-74) ☐☐ **years old**	(75-76) Yes . . . 1 No . . . 2 Don't Know . . 3 (2, 3) **SKIP TO Q.A-12**
(47-48) Yes . . . 1 No . . . 2 → **SKIP TO NEXT PERSON**	(49-52) $ ☐☐☐☐ **SKIP TO NEXT PERSON ON PAGE 8.**	(53-54) ☐☐ **years old**	(55-[illegible]) Yes . . . 1 No . . . 2 Don't Know . . 3 (2, 3) **SKIP TO Q.A-12**

⇦ CUT ALONG THIS LINE ⇦

MEMBERS OF HOUSEHOLD AT LAST INTERVIEW

A-9 What kind of health services has (PERSON) needed? (DO NOT READ LIST. CHECK ALL THAT APPLY.)	A-10 Did (PERSON) get *all* the health services (he/she) needed?	A-11 Why didn't (he/she) get all of the health care (he/she) needed? (PROBE)
Check-up . . . . ☐ (43-44) Medical . . . . ☐ (45-46) Dental . . . . ☐ (47-48) Eyes (optical) . . . ☐ (49-50) Mental/ psychological . . ☐ (51-52) Other (SPECIFY) . ☐ (53-54) ______	(55-56) Yes . . . 1 → SKIP TO Q.A-12 No . . . 2	(57-58) ______ ______ ______ ______ ______
Check-up . . . . ☐ (27-28) Medical. . . . . ☐ (29-30) Dental . . . . ☐ (31-32) Eyes (optical) . . . . ☐ (33-34) Mental/ psychological . . . ☐ (35-36) Other (SPECIFY) . ☐ (37-38) ______	(39-40) Yes . . . 1 → SKIP TO Q.A-12 No . . . 2	(41-42) ______ ______ ______ ______ ______
START CARD 03 Check-up . . . . ☐ (09-10) Medical . . . . ☐ (11-12) Dental . . . . ☐ (13-14) Eyes (optical) . . . . ☐ (15-16) Mental/ psychological . . . ☐ (17-18) Other (SPECIFY) . ☐ (19-20) ______	(21-22) Yes . . . 1 → SKIP TO Q.A-12 No . . . 2	(23-24) ______ ______ ______ ______ ______
Check-up . . . . ☐ (57-58) Medical . . . . ☐ (59-60) Dental . . . . ☐ (61-62) Eyes (optical) . . . . ☐ (63-64) Mental/ psychological . . . ☐ (65-66) Other (SPECIFY) . ☐ (67-68) ______	(69-70) Yes . . . 1 → SKIP TO Q.A-12 No . . . 2	(71-72) ______ ______ ______ ______ ______

A-12 During the last 6 months has (PERSON) been taking any courses or attending any sort of training program or school, either full-time or part-time?	A-13 What kind of school, course or training program has (PERSON) been going to or taking?	A-14 **ASK Q.A-14 ONLY OF MAN AND WOMAN OF THE HOUSE.** Why have you been taking these courses or attending school? (PROBE: What (do/did) you want to get out of it?)
(59-60) **Taking courses or attending school or a training program** *part-time* . . . . 1 **Attending school or a training program** *full-time* . . . . 2 **No** . . . . 3 **SKIP TO Q.A-15**	(61-62) **College/Jr. College** . . . . . 1 **Vocational, technical, or business school** . . . . . 2 **Government-sponsored training program.** . . . . 3 **(SPECIFY)** ________ **Correspondence course.** . 4 **Secondary school** 5	(63-64)
(43-44) **Taking courses or attending school or a training program** *part-time* . . . . 1 **Attending school or a training program** *full-time* . . . . 2 **No** . . . . 3 **SKIP TO Q.A-15**	(45-46) **College/Jr. College** . . . . 1 **Vocational, technical, or business school** . . . . . 2 **Government-sponsored training program.** . . . . 3 **(SPECIFY)** ________ **Correspondence course.** . 4 **Secondary school** 5	(47-48)
(25-26) **Taking courses or attending school or a training program** *part-time* . . . . 1 **Attending school or a training program** *full-time* . . . . 2 **No** . . . . 3 **SKIP TO Q.A-15**	(27-28) **College/Jr. College** . . . . . 1 **Vocational, technical, or business school** . . . . . 2 **Government-sponsored training program** . . . . 3 **(SPECIFY)** ________ **Correspondence course.** . 4 **Grade or high school** . . . 5 **Nursery school/day care.** 6	
(73-74) **Taking courses or attending school or a training program** *part-time* . . . . 1 **Attending school or a training program** *full-time* . . . . 2 **No** . . . . 3 **SKIP TO Q.A-15**	(75-76) **College/Jr. College** . . . . . 1 **Vocational, technical, or business school** . . . . . 2 **Government-sponsored training program.** . . . . 3 **(SPECIFY)** ________ **Correspondence course.** . 4 **Grade or high school** . . . 5 **Nursery school/day care.** 6	

CUT ALONG THIS LINE

MEMBERS OF HOUSEHOLD AT LAST INTERVIEW

A-15 How many years of formal schooling, other than kindergarten and pre-school has (PERSON) completed?	A-16 Has (PERSON) taken the GED? The GED is a test, that allows you to get a high school equivalency diploma, if you score high enough.	A-17 Did (PERSON) receive a high school equivalency certificate?
(65-66) ☐☐ years	(67-68) Yes . . . 1 No . . . 2 } SKIP TO NEXT PERSON Q.A-1 Don't Know . . 3 }	(69-70) Yes . . . 1 No . . . 2
(49-50) ☐☐ years	(51-52) Yes . . . 1 No . . . 2 } SKIP TO NEXT PERSON Q.A-1 Don't Know . . 3 }	(53-54) Yes . . . 1 No . . . 2
(29-30) ☐☐ years	(31-32) Yes . . . 1 No . . . 2 } SKIP TO NEXT PERSON Q.A-1 Don't Know . . 3 }	(33-34) Yes . . . 1 No . . . 2
START CARD 04 (09-10) ☐☐ years	(11-12) Yes . . . 1 No . . . 2 } SKIP TO Q.A-18 ON PAGE 13 Don't Know . . 3 }	(13-14) Yes . . . 1 No . . . 2

GO BACK TO Q.A-1 ON PAGE 8 AND ASK ABOUT THE NEXT PERSON ON THE LIST

IF NO OTHER PEOPLE ARE LISTED

ASK Q. A-18

A-18. **During the last 6 months, has anyone been living with you in your (house/apartment) that we haven't already talked about? Any new babies, friends or relatives?**

(71-72)

No . . . .2 → **SKIP TO INTRODUCTION TO HOUSING INFORMATION SECTION ON PAGE 19.**

Yes 1

A-18.(A) How many people?

☐☐

(73-74)

→ GO TO Q. A-18.

NEW MEMBERS OF HOUSEHOLD

A-19 What are their names? **PRINT EACH PERSON'S NAME BELOW, MAKING SURE THE SPELLING IS CORRECT. THEN ASK QUESTIONS A-20 TO A-32 FOR EACH PERSON.**	A-20 Is (PERSON) Male or Female?	A-21 What is (PERSON'S) relationship to the head of household?	A-22 How old was (PERSON) on (his/her) last birthday? **(IF INFANT UNDER 12 MONTHS RECORD "01", FOR ALL OTHERS RECORD AGE IN YEARS.)**
(first name) (last name) (75-76)	START CARD 07 (09-10) **Male . . . . . 1** **Female . . . 2**	(11-12) **Child/Stepchild . . . . 1** **Parent (In-Law) . . . . 2** **Brother/Sister (In-Law) . . . 3** **Other Relative . . . . 4** **No Legal Relation: friend, boarder, etc. . . . . 5** **Spouse . . . . 6** **Ex-Spouse 7**	(13-14) **years old**
(first name) (last name) (64-65)	(66-67) **Male . . . . . 1** **Female . . . 2**	(68-69) **Child/Stepchild . . . . 1** **Parent (In-Law) . . . . 2** **Brother/Sister (In-Law) . . . 3** **Other Relative . . . . 4** **No Legal Relation: friend, boarder, etc. . . . . 5** **Spouse . . . . 6** **Ex-Spouse 7**	(70-71) **years old**
(first name) (last name) (52-53)	(54-55) **Male . . . . . 1** **Female . . . 2**	(56-57) **Child/Stepchild . . . . 1** **Parent (In-Law) . . . . 2** **Brother/Sister (In-Law) . . . 3** **Other Relative . . . . 4** **No Legal Relation: friend, boarder, etc. . . . . 5** **Spouse . . . . 6** **Ex-Spouse 7**	(58-59) **years old**
(first name) (last name) (37-38)	(39-40) **Male . . . . . 1** **Female . . . 2**	(41-42) **Child/Stepchild . . . . 1** **Parent (In-Law) . . . . 2** **Brother/Sister (In-Law) . . . 3** **Other Relative . . . . 4** **No Legal Relation: friend, boarder, etc. . . . . 5** **Spouse . . . . 6** **Ex-Spouse 7**	(43-44) **years old**

A-23 When did (PERSON) move into your (house/apartment)?	A-24 Is (PERSON) still living with you?	A-25 How long did (PERSON) live with you?
(15-16) (17-18) ☐☐ 19 ☐☐ month year	(19-20) Yes . . . . . 1 → SKIP TO Q.A-26 No 2	(21-23) (24-25) # ☐☐☐ of days . . . . 1 of weeks . . . 2 of months . . 3 SKIP TO Q.A-31
(72-73) (74-75) ☐☐ 19 ☐☐ month year	(76-77) Yes . . . . . 1 → SKIP TO Q.A-26 No 2	START CARD 08 (09-11) (12-13) # ☐☐☐ of days . . . . 1 of weeks . . . 2 of months . . 3 SKIP TO Q.A-31
(60-61) (62-63) ☐☐ 19 ☐☐ month year	(64-65) Yes . . . . . 1 → SKIP TO Q.A-26 No 2	(66-6[illegible] (69-70) # ☐☐☐ of days . . . . 1 of weeks . . . 2 of months . . 3 SKIP TO Q.A-31
(45-46) (47-48) ☐☐ 19 ☐☐ month year	(49-50) Yes . . . . . 1 → SKIP TO Q.A-26 No 2	(51-53) ([illegible]-55) # ☐☐☐ of days . . . . 1 of weeks . . . 2 of months . . 3 SKIP TO Q.A-31

CUT ALONG THIS LINE

NEW MEMBERS OF HOUSEHOLD

A-26 During the last 6 months, has (PERSON) needed any medical help or health care:	A-27 What kind of health services has (PERSON) needed? (DO NOT READ LIST. CHECK ALL THAT APPLY.)	A-28 Did (PERSON) get *all* the health services (he/she) needed?
(26-27) Yes . . . . 1 No . . . . 2 } SKIP TO Q.A-30 Don't Know . . 3 } SKIP TO Q.A-30	Check-up . . . . . . ☐ (28-29) Medical . . . . ☐ (30-31) Dental . . . . ☐ (32-33) Eyes (optical) . . ☐ (34-35) Mental/ psychological . ☐ (36-37) Other (SPECIFY). . . ☐ (38-39) ________________	(40-41) Yes. . . . . . . 1 → SKIP TO Q.A-30 No 2
(14-15) Yes . . . . 1 No . . . . 2 } SKIP TO Q.A-30 Don't Know . . 3 } SKIP TO Q.A-30	Check-up . . . . . . ☐ (16-17) Medical . . . . ☐ (18-19) Dental . . . . ☐ (20-21) Eyes (optical) . . ☐ (22-23) Mental/ psychological . ☐ (24-25) Other (SPECIFY). . . ☐ (26-27) ________________	(28-29) Yes. . . . . . . 1 → SKIP TO Q.A-30 No 2
(71-72) Yes . . . . 1 No . . . . 2 } SKIP TO Q.A-30 Don't Know . . 3 } SKIP TO Q.A-30	START CARD 09 Check-up . . . . . . ☐ (73-74) Medical . . . . ☐ (75-76) Dental . . . . ☐ (77-78) Eyes (optical) . . ☐ (79-80) Mental/ psychological . ☐ (09-10) Other (SPECIFY). . . ☐ (11-12) ________________	(13-14) Yes. . . . . . . 1 → SKIP TO Q.A-30 No 2
(56-57) Yes . . . . 1 No . . . . 2 } SKIP TO Q.A-30 Don't Know . . 3 } SKIP TO Q.A-30	Check-up . . . . . . ☐ (58-59) Medical . . . . ☐ (60-61) Dental . . . . ☐ (62-63) Eyes (optical) . . ☐ (64-65) Mental/ psychological . ☐ (66-67) Other (SPECIFY). . . ☐ (68-69) ________________	(70-71) Yes. . . . . . . 1 → SKIP TO Q.A-30 No 2

A-29 Why didn't (he/she) get all of the health care (he/she) needed?	A-30 Is (PERSON) now employed, going to school full or part-time, or what? (CHECK ALL THAT APPLY)	A-31 (Does/did) (PERSON) help pay any household expenses?
(42-43)	Employed full time . . ☐ (44-45) Employed part time . . ☐ (46-47) Going to school full-time . . . . ☐ (48-49) Going to school part-time . . . . ☐ (50-51) Looking for work . . . ☐ (52-53) Temporarily laid off . ☐ (54-55) Other (SPECIFY). . . . ☐ (56-57)	(58-59) Yes . . . . 1 No . . . . 2 → SKIP TO NEXT NEW PERSON
(30-31)	Employed full time . . ☐ (32-33) Employed part time . . ☐ (34-35) Going to school full-time . . . . ☐ (36-37) Going to school part-time . . . . ☐ (38-39) Looking for work . . . ☐ (40-41) Temporarily laid off . ☐ (42-43) Other (SPECIFY). . . . ☐ (44-45)	(46-47) Yes . . . . 1 No . . . . 2 → SKIP TO NEXT NEW PERSON
(15-16)	Employed full time . . ☐ (17-18) Employed part time . . ☐ (19-20) Going to school full-time . . . . ☐ (21-22) Going to school part-time . . . . ☐ (23-24) Looking for work . . . ☐ (25-26) Temporarily laid off . ☐ (27-28) Other (SPECIFY). . . . ☐ (29-30)	(31-32) Yes . . . . 1 No . . . . 2 → SKIP TO NEXT NEW PERSON
(72-73)	START CARD 10 Employed full time . . ☐ (74-75) Employed part time . . ☐ (76-77) Going to school full-time . . . . ☐ (09-10) Going to school part-time . . . . ☐ (11-12) Looking for work . . . ☐ (13-14) Temporarily laid off . ☐ (15-16) Other (SPECIFY). . . . ☐ (17-18)	(19-20) Yes . . . . 1 No . . . . 2 → SKIP TO INTRODUCTION TO HOUSING INFORMATION ON PAGE 19.

CUT ALONG THIS LINE

NEW MEMBERS OF HOUSEHOLD

A-32 About how much has (PERSON) paid toward household expenses in the last 6 months?
(60-63) $ ☐☐☐☐ during the last 6 months
(48-51) $ ☐☐☐☐ during the last 6 months
(33-36) $ ☐☐☐☐ during the last 6 months
(21-24) $ ☐☐☐☐ during the last 6 months

GO BACK TO Q. A-19 ON PAGE 14 UNTIL THIS SECTION IS COMPLETED FOR ALL NEW PEROSNS IN THE HOUSEHOLD.

AFTER YOU HAVE ASKED ABOUT ALL NEW MEMBERS IN THE HOUSEHOLD,

↓

GO TO INTRODUCTION TO HOUSING INFORMATION SECTION AT THE TOP OF THE NEXT PAGE.

INTRODUCTION

HOUSING INFORMATION SECTION

Now I would like to ask you some questions about your housing and how much it has cost you during the last 6 months.

A-33. Are you . . . **(READ EACH CATEGORY)**

(25-26)

Renting your (house/apartment) .1
Buying it, or 2
Living with friends or relatives in their house or apartment? 3
OTHER (SPECIFY):
__________________ 4
____

A-34. How many rooms do you have in your (house/apartment) not counting bathrooms, porches, balconies, foyers, halls, or half-rooms?

# ☐☐ **rooms**
(27-28)

A-35. In all, how many rooms in your (house/apartment) are usually used for *sleeping* purposes?

# ☐☐ **sleeping rooms**
(29-30)

A-36. Is your (house/apartment) heated well enough to keep your family comfortable in winter?

Yes 1
No 2
(31-32)

A-37. Do you have complete kitchen facilities in this (house/apartment)? Complete kitchen facilities are a sink with piped water, a range or cookstove, and a refrigerator.

Yes 1
No . . . . 2 → **SKIP TO Q.A-39.**
(33-34)

A-38. Are these facilities used by another household?

Yes 1
No 2
} → **SKIP TO Q.A-43.**
(35-36)

A-39. Is there a common kitchen that you share with other families?

Yes . . . 1
No . . . 2
(37-38)

A-40. Do you have your own stove or hot plate?

Stove 1
Hot plate 2
Neither stove nor hot plate . . . 3
(39-40)

A-41. Do you have your own sink with piped water?

Yes 1
No 2
(41-42)

A-42. Do you have your own refrigerator?

Yes 1
No 2
(43-44)

A-43. Do you have complete plumbing facilities in this (house/apartment), that is, a sink with hot and cold piped water, a flush toilet and a bathtub *or* shower?

Yes . . . 1
No . . . 2 → **SKIP TO Q.A-45.**
(45-46)

A-44. Are these facilities used by another household?

Yes . . . 1 }
No . . . 2 } (47-48) → SKIP TO Q.A-48.

A-45. (ASK IN MULTI-DWELLING UNITS ONLY, IN SINGLE-FAMILY DWELLINGS, SKIP TO Q.A-46.)

Are there complete plumbing facilities in this building which are available for you to use?

Yes 1
No 2
(49-50)

A-46. Do you have your own flush toilet?

Yes 1
No 2
(51-52)

A-47. Do you have your own bathtub or shower?

Yes 1
No 2
(53-54)

A-48. What is your address now? *(Print)*

____
Street & Number

____
City State

(55-59) ☐☐☐☐☐ Zip Code

(60-61) ☐☐ State Code

A-49. What is your . . .

a) Home telephone number?

☐☐☐ ☐☐☐-☐☐☐☐
Area Code

b) Telephone number at work?

Man of the House:

☐☐☐ ☐☐☐-☐☐☐☐
Area Code

Woman of the House:

☐☐☐ ☐☐☐-☐☐☐☐
Area Code

c) Is there another telephone number through which you can be reached?

☐☐☐ ☐☐☐-☐☐☐☐
Area Code

d) Whose phone is this?

____

A-50. Has your family moved in the last six months?

Yes . . . 1 ↓
No . . . 2 → SKIP TO Q. A-55
(62-63)

A-51. How many times have you moved during the last six months?

☐☐ moves
(64-65)

LIST BELOW EACH PLACE THE FAMILY HAS LIVED DURING THE LAST 6 MONTHS, OTHER THAN THE PRESENT ADDRESS. START WITH THE MOST RECENT ADDRESS AND WORK BACK.

	A-52. Specific Address	A-53. How long did you live there?	A-54. Why did you move from that (house/apartment)?	
(a) Most Recent Address (Not present address)	City State	(69-70) (66-68) # ☐☐☐ days . . . . 1 weeks . . . 2 months . . 3 years. . . . 4	(71-76)	START CARD 11 (08-10) ☐☐ Move Code (11-12) ☐☐ State Code
(b) Next Most Recent Address	City State	(16-17) (13-15) # ☐☐☐ days . . . . 1 weeks . . . 2 months . . 3 years. . . . 4	(18-23)	(24-25) ☐☐ Move Code (26-27) ☐☐ State Code

A-55 Many people move, whether they plan to or not, and we will want to get in touch with you six months from now. Please give me the name, addresses and telephone numbers of 2 close relatives or friends who would be likely to know your new address in the event that you move.

PLEASE PRINT

(a) **Name** ____________________

Relationship ____________________

Address ____________________
(No.) (Street)

____________________ ☐☐☐☐☐
(City) (State) (Zip)

☐☐☐ ☐☐☐-☐☐☐☐
Area Code (Telephone)

IF REFERENCE IS FEMALE, ASK:

What is her husband's first name?

____

(b) **Name** ____________________

Relationship ____________________

Address ____________________
(No.) (Street)

____________________ ☐☐☐☐☐
(City) (State) (Zip)

☐☐☐ ☐☐☐-☐☐☐☐
Area Code (Telephone)

IF REFERENCE IS FEMALE, ASK:

What is her husband's first name?

____

COST OF HOUSING DURING LAST 6 MONTHS

INTRODUCTION

Now I would like to ask you how much you have spent for housing during each of the last six months. If you don't remember exactly how much something cost please give me your best guess.

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
A-56(A). How much did you pay out for rent or mortgage payments last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-56(B).)	$ ☐☐☐ (28-30)	$ ☐☐☐ (31-33)	$ ☐☐☐ (34-36)	$ ☐☐☐ (37-39)	$ ☐☐☐ (40-42)	$ ☐☐☐ (43-45)
A-56(B). Is that the same as you paid out for (rent/mortgage) during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-57(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR (RENT/MORTGAGE) FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.	________ (Enter pay period if other than monthly)	________	________	________	________	________
A-57(A). How much did you pay out for electricity last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-57(B).)	$ ☐☐☐ (46-48)	$ ☐☐☐ (49-51)	$ ☐☐☐ (52-54)	$ ☐☐☐ (55-57)	$ ☐☐☐ (58-60)	$ ☐☐☐ (61-63)
A-57 (B). Is that the same as you paid out for electricity during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-58(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR ELECTRICITY FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
A-58(A)	$ ☐☐☐ (64-66)	$ ☐☐☐ (67-69)	$ ☐☐☐ (70-72)	$ ☐☐☐ (73-75)	$ ☐☐☐ (76-78)	START CARD 12 $ ☐☐☐ (09-11)
A-59(A)	$ ☐☐☐ (12-14)	$ ☐☐☐ (15-17)	$ ☐☐☐ (18-20)	$ ☐☐☐ (21-23)	$ ☐☐☐ (24-26)	$ ☐☐☐ (27-29)

A-58(A). How much did you pay out for heating costs, like fuel oil, gas, coal, wood –– things other than electricity last month?
(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q. A-58(B).)

A-58(B). Is that the same as you paid out for heating costs during each of the last 6 months?

Yes ... 1 → SKIP TO Q.A-59(A)

No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR HEATING COSTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.

A-59(A). How much did you pay out for telephone last month?
(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-59(B).)

A-59(B). Is that the same as you paid out for telephone during each of the last 6 months?

Yes ... 1 → SKIP TO Q.A-60(A)

No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR TELEPHONE FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.

COST OF HOUSING SECTION

	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
A-60(A). How much did you pay out for water last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-60(B).)	☐☐☐ (30-32)	☐☐☐ (33-35)	☐☐☐ (36-38)	☐☐☐ (39-41)	☐☐☐ (42-44)	☐☐☐ (45-47)
A-60(B). Is that the same as you paid out for water during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-61(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR WATER FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						
A-61(A). How much did you pay out for sewer last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-61(B).)	☐☐☐ (48-50)	☐☐☐ (51-53)	☐☐☐ (54-56)	☐☐☐ (57-59)	☐☐☐ (60-62)	☐☐☐ (63-65)
A-61(B). Is that the same as you paid out for sewer during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-62(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR SEWER FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
A-62(A). How much did you pay out for trash collection last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-62(B).)	$ ☐☐☐ (66-68)	$ ☐☐☐ (69-71)	$ ☐☐☐ (72-74)	$ ☐☐☐ (75-77)	START CARD 13 $ ☐☐☐ (09-11)	$ ☐☐☐ (12-14)
A-62(B). Is that the same as you paid out for trash collection during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-63(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR TRASH COLLECTION FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						
A-63(A). How much did you pay out for property taxes last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-63(B).)	$ ☐☐☐ (15-17)	$ ☐☐☐ (18-20)	$ ☐☐☐ (21-23)	$ ☐☐☐ (24-26)	$ ☐☐☐ (27-29)	$ ☐☐☐ (30-32)
A-63(B). Is that the same as you paid out for property taxes during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-64(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR PROPERTY TAXES FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

COST OF HOUSING SECTION

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
A-64(A). How much did you pay out for homeowner's insurance last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-64(B).) A-64(B). Is that the same as you paid out for homeowner's insurance during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-65(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR HOMEOWNER'S INSURANCE FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.	$ ☐☐☐ (33-35)	$ ☐☐☐ (36-38)	$ ☐☐☐ (39-41)	$ ☐☐☐ (42-44)	$ ☐☐☐ (45-47)	$ ☐☐☐ (48-50)
A-65(A). How much did you pay out for any repairs on your (house/apartment) that you were not reimbursed for last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-65(B).) A-65(B) Is that the same as you paid out for repairs on your (house/apartment) that you were not reimbursed for during each of the last 6 months? Yes ... 1 → SKIP TO Q.A-66(A) No ... 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR REPAIRS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.	$ ☐☐☐ (51-53)	$ ☐☐☐ (54-56)	$ ☐☐☐ (57-59)	$ ☐☐☐ (60-62)	$ ☐☐☐ (63-65)	$ ☐☐☐ (66-68)

COST OF HOUSING SECTION

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
A-66(A). How much did you pay out last month for any other housing expenses we haven't talked about? (SPECIFY) (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.A-66(B).)	$ ☐☐☐ (69-71)	$ ☐☐☐ (72-74)	$ ☐☐☐ (75-77)	START CARD 14 $ ☐☐☐ (08-11)	$ ☐☐☐ (12-14)	$ ☐☐☐ (15-17)
A-66(B). Is that the same as you paid out for other expenses during each of the last 6 months? Yes . . . 1 → SKIP TO INSTRUCTIONS BELOW No . . . 2 → ASK SPECIFIC AMOUNTS PAID OUT PER MONTH FOR OTHER EXPENSES FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

WHEN YOU HAVE FINISHED THIS SECTION SAY:

Now I would like to ask you some questions about your employment experiences during the last 6 months.

IF THERE IS A MAN-OF-THE -HOUSE, TURN THE PAGE AND BEGIN WITH Q.B-1.

IF THERE IS NO MAN-OF-THE-HOUSE, SKIP TO PAGE 42 AND BEGIN WITH Q.F-1.

EMPLOYMENT STATUS

MAN OF THE HOUSE

First, I would like to ask Mr. *(name of man of the house)* about his employment.

B-1. Are you employed now? By employed, we mean working for pay at a job, running your own business or profession, or working in your family's business with or without pay. We count being on paid vacation or paid sick leave as being employed.

Yes . . . 1 → SKIP TO Q.B-12.
(18-19)
No . . . 2

B-2. At the present time, do you think that you want to be employed?

Yes . . . 1 → SKIP TO Q.B-4.
No . . . 2 (20-21)
Don't know . . 3

B-3. There can be lots of reasons why someone might not want to have a job, or be unsure about it. Why do *you* feel the way you do?
(22-29)

SKIP TO Q.B-6.

B-4. During the past month, have you been trying to find a job?

Yes . . . 1 → SKIP TO Q.B-8.
(30-31)
No . . . 2

B-5. Please tell me why you haven't looked for a job recently. (32-37)

B-6. Have you looked for a job at any time during the past 6 months?

Yes . . . 1
(38-39)
No . . . 2 → SKIP TO Q.B-11.

B-7. How long did you spend looking for work?

(40-42) (43-44)
☐☐☐ of
days 1
weeks . . . 2
months . . 3

SKIP TO Q.B-9A.

B-8. How long have you been trying to get a job?

(40-42) (43-44)
☐☐☐ of
days 1
weeks . . . 2
months . 3

B-9A. We're interested in finding out about the different kinds of ways people go about looking for a job.

When you decided to look for work, what was the first thing you did to try and find out what jobs were available?

(PROBE FOR SPECIFIC DETAILS OF JOB SEARCH, INCLUDING THE NAMES OF ANY PUBLIC OR PRIVATE AGENCIES CONTACTED DURING SEARCH)
(45-64)

MAN OF THE HOUSE

B-9B. What did you do next?

____

____

____

____

____

____

B-9C. What else did you do to try to find work?

____

____

____

____

____

____

B-10. What do you think are the main reasons you have not been able to get a job? **(PROBE)** (65-70)

____

____

____

____

____

B-11. Have you had any job in the last six months?

(71-72)

Yes . . . 1 → **SKIP TO INTERVIEWER INSTRUCTIONS ON PAGE 41**

No . . . 2

B-12. How many employers have you worked for in the last 6 months?

☐☐ employers

(73-74)

B-13. Please give me the names of (all) your employer(s) in the last 6 months starting with your most recent employer, and working backward.

Most recent employer:

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

B-14. Are you now, or have you at any time during the last 6 months worked for more than one employer at the same time?

(75-76)

Yes . . . 1 → Which ones?

____

No . . . 2

____

B-15. Altogether, how much time have you been unemployed during the last 6 months? **(ENTER '0' IF PERSON HAS BEEN CONTINUOUSLY EMPLOYED).**

START CARD 15

(09-11)

☐☐☐ of

(12-13)

days 1

weeks 2

months . . 3

MAN OF THE HOUSE
JOB 1

First, I'm going to ask you about your experiences working for

____
Print Name of Employer #1
from Q. B-13

C-1. Please tell me *(Name of Employer)'s* address.

Street ______________________________

City ________________________________

State ______________ ☐☐☐☐☐
(Zip Code)

C-2. What kind of business or industry is that? What does *(Name of Employer)* make or do? (14-15)

____

____

____

C-3. When did you start working for this employer?

(16-17)	(18-19)		(20-21)
☐☐	☐☐	19	☐☐
Month	Day		Year

(IF RESPONDENT IS NOT SURE, OBTAIN BEST GUESS)

C-4. Are you still working for this employer?

Yes . . . 1 → SKIP TO Q.C-6.
No 2 (22-23)

C-5. When did you stop working for this employer?

(24-25)	(26-27)		(28-29)
☐☐	☐☐	19	☐☐
Month	Day		Year

(IF RESPONDENT IS NOT SURE, OBTAIN BEST GUESS)

C-6. When you *first started* working for this employer how much were you getting paid, *before any taxes were taken out?*

(30-35) (36-37)

$ ☐☐☐☐.☐☐ per
hour . . . 1
day 2
week . . . 3
month . . 4

C-7. REFER TO Q.C-4.
IF PERSON IS *NOW* WORKING FOR THIS EMPLOYER ASK (A).
IF PERSON HAS *LEFT* THIS EMPLOYER ASK (B).

(A) How much do you get paid *now, before any taxes are taken out?*

(B) How much were you getting paid, *before any taxes were taken out,* when you *left* this employer?

(38-43) (44-45)

$ ☐☐☐☐.☐☐ per
hour . . . 1
day 2
week . . . 3
month . . 4

MAN OF THE HOUSE
JOB 1

C-8. In addition to your regular wage or salary, in the last 6 months, have you ever received *additional* pay for things like overtime, bonus or tips?

No . . . .2 ⟶ SKIP TO Q.C-9.
(46-47)
Yes . . . 1

(A) About how much did this amount to during the last 6 months?

$ ☐☐☐☐
(48-51)

C-9. Do you feel the pay you (receive is/received was) fair pay for the work you (do/did)?

Yes . . . 1
(52-53)
No 2

C-10. In the last 6 months, how many hours a week did you *usually* work for this employer?

☐☐ hours per week
(54-55)

C-11. During this time, were there some weeks when you worked more than the usual number of hours?

No . . . .2 ⟶ SKIP TO Q.C-12.
(56-57)
Yes . . . 1

(A) About how many weeks in all did you work *more* than the usual number of hours during the last 6 months?

☐☐ weeks
(58-59)

(B) How many hours did you work a week when you worked more than the usual number of hours?

☐☐ hours per week
(60-61)

C-12. Were there some weeks when you worked *fewer* than the usual number of hours?

No . . . .2 ⟶ SKIP TO Q.C-13.
(62-63)
Yes . . . 1

(A) About how many weeks in all did you work *fewer* than the usual number of hours during the last 6 months?

☐☐ weeks
(64-65)

(B) How many hours did you work a week when you worked fewer than the usual number of hours?

☐☐ hours per week
(66-67)

C-13. Would you have been willing to work more hours a week if they had been available?

Yes . . . 1
(68-69)
No 2

C-14. While working for this employer, how many days did you miss from work because of illness or other personal reasons in the last 6 months?

☐☐☐ days
(70-72)

C-15. When you first started working for this employer, were you responsible for supervising anyone on the job?

No . . . 2 ⟶ SKIP TO Q. C-16
(73-74)
Yes . . . 1

A. How many people?

☐☐☐ people
START CARD 16 (09-11)

MAN OF THE HOUSE
JOB 1

C-16. (Are you now/When you left were you) responsible for supervising anyone on the job?

No ... 2 → SKIP TO Q. C-17 (12-13)

Yes ... 1

A. How many people?

☐☐☐ people
(14-16)

C-17. When you first started working for this employer, how closely were you supervised? Would you say you had
(READ LIST AND CIRCLE ONE.) (17-18)

Very close supervision 1
Pretty close supervision 2
Some supervision 3
Little supervision 4
No supervision 5

C-18. REFER TO Q.C-4. – IF PERSON IS STILL WORKING FOR THIS EMPLOYER, ASK (A); IF PERSON HAS LEFT EMPLOYER ASK (B).

(A) How closely are you supervised now? Would you say you now have . . .
(READ LIST AND CIRCLE ONE.)

(B) When you left, how closely were you supervised? Would you say you had . . .
(READ LIST AND CIRCLE ONE.) (19-20)

Very close supervision 1
Pretty close supervision 2
Some supervision 3
Little supervision 4
No supervision 5

C-19. When you *first* started working for this employer, could you generally
(READ AND CIRCLE ONE.) (21-22)

Do your work pretty much the way you thought it should done, or 1
Did someone else tell you how it had to be done 2

C-20. (Do you now/When you left did you)
(READ AND CIRCLE ONE.) (23-24)

Do your work pretty much the way you (think/thought) it should be done, or 1
(Does/did) someone else tell you how it (has/had) to be done? 2

C-21. When you first started working for this employer, what work tasks were you responsible for doing? **(PROBE)** (25-30)

____

____

____

____

C-22. (At the present time/When you left the job) what tasks (are/were) you responsible for doing? [PROBE–(Are/Were) your work tasks different from when you started this job?] (31-36)

____

____

____

____

C-23. Other than pay, do you feel your employer usually (treats/treated) you fairly, or unfairly? **(DO NOT READ – CIRCLE ONE.)** (37-38)

Always treated fairly 4
Usually treated fairly 3
Usually treated unfairly 2
Always treated unfairly 1

MAN OF THE HOUSE
JOB 1

C-24. How about the people you (work/worked) with on this job – would you say
(READ LIST AND CIRCLE ONE) (39-40)

Most (are/were) really great	5
Most (are/were) pretty nice	4
Most (are/were) okay	3
You (don't/didn't) like most of them very much, or	2
You really (dislike/disliked) most of them a lot	1

C-25. How about the actual work you (do/did) – in general (do/did) you
(READ LIST AND CIRCLE ONE) **(41-42)**

Like it a lot	5
Mostly like it	4
Like it about as much as you dislike it	3
Mostly dislike it	2
Not like it at all	1

C-26. *How* did you go about getting a job with this employer – through a job placement service, a friend, applying by yourself, or what?

(PROBE FOR A CLEAR AND FULL EXPLANATION. MAKE SURE YOU GET THE NAMES OF ANY JOB PLACEMENT SERVICES USED, SUCH AS THE STATE EMPLOYMENT AGENCY, MOUNTAIN-PLAINS, ETC. DID RESPONDENT TAKE THE INIATIVE IN FINDING THE JOB? IN GENERAL, WHAT RESOURCES DID RESPONDENT USE AND FROM WHOM DID HE GET ASSISTANCE?)

(43-54)

C-27. Why did you take a job with this employer?

(PROBE FOR A SPECIFIC AND CLEAR EXPLANATION – WAS THIS THE ONLY JOB AVAILABLE? DID RESPONDENT HAVE A CHOICE OF JOBS – IF SO, WHY DID HE PICK THIS EMPLOYER? ETC.)

(55-58)

C-28. **ASK THIS QUESTION ONLY IF PERSON IS NO LONGER WORKING FOR THIS EMPLOYER. SEE Q.C-4.**

Why did you leave this employer?

(PROBE FOR A SPECIFIC AND FULL EXPLANATION.)

(59-62)

INTERVIEWER INSTRUCTIONS

REFER BACK TO Q.B-13. ON PAGE 29. IF PERSON HAS WORKED FOR ANOTHER EMPLOYER WITHIN THE LAST 6 MONTHS, TURN THE PAGE AND COMPLETE THE NEXT EMPLOYMENT HISTORY FOR THAT JOB.

IF THIS IS THE LAST EMPLOYER PERSON HAS WORKED FOR WITHIN THE LAST 6 MONTHS AND IF THERE IS A WOMAN-OF-THE-HOUSE TURN TO PAGE 42. AND ADDRESS QUESTIONS TO THE WOMAN-OF-THE-HOUSE.

IF THERE IS NO WOMAN-OF-THE-HOUSE TURN TO THE FAMILY INCOME SECTION ON PAGE 56.

EMPLOYMENT STATUS

WOMAN OF THE HOUSE

Now, I would like to ask you *(name of the woman of the house)* about your employment experiences during the last 6 months.

F-1. Are you employed now? By employed, we mean working for pay at a job, running your own business or profession, or working in your family's business with or without pay. We count being on paid vacation or paid sick leave as being employed.

Yes . . . 1 → SKIP TO Q.F-12.
(17-18)
No . . . 2

F-2. At the present time, do you think that you want to be employed?

Yes . . . 1 → SKIP TO Q.F-4.
No . . . 2 (19-20)
Don't know . . 3

F-3. There can be lots of reasons why someone might not want to have a job, or be unsure about it. Why do *you* feel the way you do?
(21-28)

SKIP TO Q.F-6

F-4. During the past month, have you been trying to find a job?

Yes . . . 1 → SKIP TO Q.F-8.
(29-30)
No . . . 2

F-5. Please tell me why you haven't looked for a job recently. (31-36)

F-6. Have you looked for a job at any time during the past 6 months?

Yes . . . 1
(37-38)
No . . . 2 → SKIP TO Q.F-11.

F-7. How long did you spend looking for work?

(39-41) (42-43)
☐☐☐ of days 1
weeks . . . 2
months . . 3

SKIP TO Q.F-9A.

F-8. How long have you been trying to get a job?

(39-41) (42-43)
☐☐☐ of days 1
weeks . . . 2
months . 3

F-9A. We're interested in finding out about the different kinds of ways people go about looking for a job.

When you decided to look for work, what was the first thing you did to try and find out what jobs were available?

(PROBE FOR SPECIFIC DETAILS OF JOB SEARCH, INCLUDING THE NAMES OF ANY PUBLIC OR PRIVATE AGENCIES CONTACTED DURING SEARCH)
(44-63)

WOMAN OF THE HOUSE

F-9B. What did you do next?

F-9C. What else did you do to try to find work?

F-10. What do you think are the main reasons you have not been able to get a job? **(PROBE)** **(64-69)**

F-11. Have you had any job in the last six months?

(70-71)

Yes . . . 1 → **SKIP TO FAMILY INCOME SECTION ON PAGE 56.**

No . . . 2

F-12. How many employers have you worked for in the last 6 months?

☐☐ **employers**

(72-73)

F-13. Please give me the names of (all) your employer(s) in the last 6 months starting with your most recent employer, and working backward.

Most recent employer:

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

F-14. Are you now, or have you at any time during the last 6 months worked for more than one employer at the same time?

(74-75)

Yes . . . 1 → Which ones?

No . . . 2

F-15. Altogether, how much time have you been unemployed during the last 6 months? **(ENTER '0' IF PERSON HAS BEEN CONTINUOUSLY EMPLOYED).**

START CARD 21

(09-11) ☐☐☐ of

(12-13)

days 1

weeks 2

months . . 3

WOMAN OF THE HOUSE
JOB 1

First, I'm going to ask you about your experiences working for

____

Print Name of Employer #1 from Q.F-13

G-1. Please tell me *(Name of Employer)'s* address.

Street ________________________

City __________________________

State ____________ ☐☐☐☐☐ (Zip Code)

G-2. What kind of business or industry is that? What does *(Name of Employer)* make or do? (14-15)

____

____

____

G-3. When did you start working for this employer?

(16-17)	(18-19)		(20-21)
☐☐	☐☐	19	☐☐
Month	Day		Year

(IF RESPONDENT IS NOT SURE, OBTAIN BEST GUESS)

G-4. Are you still working for this employer?

Yes . . . 1 → SKIP TO Q. G-6

No 2 (22-23)

G-5. When did you stop working for this employer?

(24-25)	(26-27)		(28-29)
☐☐	☐☐	19	☐☐
Month	Day		Year

(IF RESPONDENT IS NOT SURE, OBTAIN BEST GUESS)

G-6. When you *first started* working for this employer how much were you getting paid, *before any taxes were taken out?*

(30-35) (36-37)

$ ☐☐☐☐ . ☐☐ per

hour . . . 1
day 2
week . . . 3
month . . 4

G-7. REFER TO Q.G-4.
IF PERSON IS *NOW* WORKING FOR THIS EMPLOYER ASK (A).
IF PERSON HAS *LEFT* THIS EMPLOYER ASK (B).

(A) How much do you get paid *now, before any taxes are taken out?*

(B) How much were you getting paid, *before any taxes were taken out,* when you *left* this employer?

(38-43) (44-45)

$ ☐☐☐☐ . ☐☐ per

hour . . . 1
day 2
week . . . 3
month . . 4

WOMAN OF THE HOUSE
JOB 1

G-8. In addition to your regular wage or salary, in the last 6 months, have you ever received *additional* pay for things like overtime, bonus or tips?

No . . . .2 → SKIP TO Q. G-9.
(46-47)
Yes . . . 1

(A) About how much did this amount to during the last 6 months?

$☐☐☐☐
(48-51)

G-9. Do you feel the pay you (receive is/received was) fair pay for the work you (do/did)?

Yes . . . 1
(52-53)
No 2

G-10. In the last 6 months, how many hours a week did you *usually* work for this employer?

☐☐ hours per week
(54-55)

G-11. During this time, were there some weeks when you worked more than the usual number of hours?

No . . . .2 → SKIP TO Q. G-12.
(56-57)
Yes . . . 1

(A) About how many weeks in all did you work *more* than the usual number of hours during the last 6 months?

☐☐ weeks
(58-59)

(B) How many hours did you work a week when you worked more than the usual number of hours?

☐☐ hours per week
(60-61)

G-12. Were there some weeks when you worked *fewer* than the usual number of hours?

No . . . .2 → SKIP TO Q. G-13.
(62-63)
Yes . . . 1

(A) About how many weeks in all did you work *fewer* than the usual number of hours during the last 6 months?

☐☐ weeks
(64-65)

(B) How many hours did you work a week when you worked fewer than the usual number of hours?

☐☐ hours per week
(66-67)

G-13. Would you have been willing to work more hours a week if they had been available?

Yes . . . 1
(68-69)
No 2

G-14. While working for this employer, how many days did you miss from work because of illness or other personal reasons in the last 6 months?

☐☐☐ days
(70-72)

G-15. When you first started working for this employer, were you responsible for supervising anyone on the job?

No . . . 2 → SKIP TO Q. G-16.
(73-74)
Yes . . . 1

A. How many people?

☐☐☐ people
START CARD 22 (09-11)

WOMAN OF THE HOUSE
JOB 1

G-16. (Are you now/When you left were you) responsible for supervising anyone on the job?

No ... 2 ⟶ SKIP TO Q. G-17.
(12-13)
Yes ... 1

A. **How many people?**

☐☐☐ **people**
(14-16)

G-17. When you first started working for this employer, how closely were you supervised? Would you say you had
(READ LIST AND CIRCLE ONE.) (17-18)

Very close supervision 1
Pretty close supervision 2
Some supervision 3
Little supervision 4
No supervision 5

G-18. REFER TO Q.G-4 – IF PERSON IS STILL WORKING FOR THIS EMPLOYER, ASK (A); IF PERSON HAS LEFT EMPLOYER ASK (B).

(A) How closely are you supervised now? Would you say you now have . . .
(READ LIST AND CIRCLE ONE.)

(B) When you left, how closely were you supervised? Would you say you had . . .
(READ LIST AND CIRCLE ONE.) (19-20)

Very close supervision 1
Pretty close supervision 2
Some supervision 3
Little supervision 4
No supervision 5

G-19. When you *first* started working for this employer, could you generally
(READ AND CIRCLE ONE.) (21-22)

Do your work pretty much the way you thought it should done, or 1
Did someone else tell you how it had to be done 2

G-20. (Do you now/When you left did you)
(READ AND CIRCLE ONE.) (23-24)

Do your work pretty much the way you (think/thought) it should be done, or 1
(Does/did) someone else tell you how it (has/had) to be done? 2

G-21. When you first started working for this employer, what work tasks were you responsible for doing? **(PROBE)** (25-30)

____
____
____
____

G-22. (At the present time/When you left the job) what tasks (are/were) you responsible for doing? [PROBE–(Are/Were) your work tasks different from when you started this job?] (31-36)

____
____
____
____

G-23. Other than pay, do you feel your employer usually (treats/treated) you fairly, or unfairly? **(DO NOT READ – CIRCLE ONE.)**
(37-38)

Always treated fairly 4
Usually treated fairly 3
Usually treated unfairly 2
Always treated unfairly 1

WOMAN OF THE HOUSE
JOB 1

G-24. How about the people you (work/worked) with on this job – would you say
(READ LIST AND CIRCLE ONE.) (39-40)

Most (are/were) really great	5
Most (are/were) pretty nice	4
Most (are/were) okay	3
You (don't/didn't) like most of them very much, or	2
You really (dislike/disliked) most of them a lot	1

G-25. How about the actual work you (do/did) – in general (do/did) you
(READ LIST AND CIRCLE ONE.) (41-42)

Like it a lot	5
Mostly like it	4
Like it about as much as you dislike it	3
Mostly dislike it	2
Not like it at all	1

G-26. *How* did you go about getting a job with this employer – through a job placement service, a friend, applying by yourself, or what?

(PROBE FOR A CLEAR AND FULL EXPLANATION. MAKE SURE YOU GET THE NAMES OF ANY JOB PLACEMENT SERVICES USED, SUCH AS THE STATE EMPLOYMENT AGENCY, MOUNTAIN-PLAINS, ETC. DID RESPONDENT TAKE THE INIATIVE IN FINDING THE JOB? IN GENERAL, WHAT RESOURCES DID RESPONDENT USE AND FROM WHOM DID HE GET ASSISTANCE?)

(43-54)

G-27. Why did you take a job with this employer?

(PROBE FOR A SPECIFIC AND CLEAR EXPLANATION – WAS THIS THE ONLY JOB AVAILABLE? DID RESPONDENT HAVE A CHOICE OF JOBS – IF SO, WHY DID SHE PICK THIS EMPLOYER? ETC.)

(55-58)

G-28. **ASK THIS QUESTION ONLY IF PERSON IS NO LONGER WORKING FOR THIS EMPLOYER. SEE Q.G-4**

Why did you leave this employer?

(PROBE FOR A SPECIFIC AND FULL EXPLANATION.)

(59-62)

INTERVIEWER INSTRUCTIONS

REFER BACK TO Q.F-13 ON PAGE 43. IF PERSON HAS WORKED FOR ANOTHER EMPLOYER WITHIN THE LAST 6 MONTHS, TURN THE PAGE AND COMPLETE THE NEXT EMPLOYMENT HISTORY FOR THAT JOB.

IF THIS IS THE LAST EMPLOYER WOMAN OF THE HOUSE HAS WORKED FOR WITHIN THE LAST 6 MONTHS SKIP TO FAMILY INCOME SECTION PAGE 56.

FAMILY INCOME SECTION

INTRODUCTION: Now I would like to ask about the family's income during the last 6 months.

In the questions that follow, earnings from employment means things like wages, salaries, tips, bonuses, commissions, farm income and business income. (17-18)

INSTRUCTIONS: → IT THERE IS NO MOH, CHECK HERE ○ AND SKIP TO Q.J-2(A).

J-1(A). (MOH), what were your total earnings from employment, *before* taxes were taken out,during last month?
(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN THE APPROPRIATE SPACES, THEN ASK Q.J-1(B).)

J-1(B). Is that the same earnings from employment that you had for each of the last 6 months?

Yes ... 1 → SKIP TO Q.J-2(A)
No ... 2 → ASK FOR SPECIFIC AMOUNTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE
(43-44)

INSTRUCTIONS: → IF THERE IS NO WOH, CHECK HERE ○ AND SKIP TO Q.J-3(A).

J-2(A). (WOH), what were your total earnings from employment, *before* any taxes were taken out, during the last month?
(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN THE APPROPRIATE SPACES, THEN ASK Q.J-2(B).)

J-2(B). Is that the same earnings from employment that you had for each of the last 6 months?

Yes ... 1 → SKIP TO Q.J-3(A)
No ... 2 → ASK FOR SPECIFIC AMOUNTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE

	1 Last Month (__/__) mo. yr.	2 The Month Before That (__/__) mo. yr.	3 The Month Before That (__/__) mo. yr.	4 The Month Before That (__/__) mo. yr.	5 The Month Before That (__/__) mo. yr.	6 The Month Before That (__/__) mo. yr.
J-1(A)	$☐☐☐☐ (19-22)	$☐☐☐☐ (23-26)	$☐☐☐☐ (27-30)	$☐☐☐☐ (31-34)	$☐☐☐☐ (35-38)	$☐☐☐☐ (39-42)
J-2(A)	$☐☐☐☐ (45-48)	$☐☐☐☐ (49-52)	$☐☐☐☐ (53-56)	$☐☐☐☐ (57-60)	$☐☐☐☐ (61-64)	$☐☐☐☐ (65-68)

1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
$☐☐☐☐ (69-72)	$☐☐☐☐ (73-76)	START CARD 27 $☐☐☐☐ (09-12)	$☐☐☐☐ (13-16)	$☐☐☐☐ (17-20)	$☐☐☐☐ (21-24)
$☐☐☐ (25-27)	$☐☐☐ (28-30)	$☐☐☐ (31-33)	$☐☐☐ (34-36)	$☐☐☐ (37-39)	$☐☐☐ (40-42)

J-3(A). In this question I am interested in the total earnings from employment earned by all other members of your family *while they were living with you* during the last 6 months.

Do *not* include the earnings of family members who pay you for their room and board. *Do* include the earnings of family members who contribute *most* of their earnings towards the family's expenses. How much did these earnings amount to last month before any taxes were taken out?

223

(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.J-3(B).)

J-3(B). Is that the same amount of earnings from employment that they had for each of the last 6 months?

57

Yes ... 1 → SKIP TO Q.J-4(A)

No ... 2 → **ASK FOR SPECIFIC AMOUNTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE**

J-4(A). Altogether, how much was paid towards family expenses *last month* by all members of the family who have lived with you during the last 6 months, but who do *not* contribute *most* of their earnings towards family expenses?

(MENTION MONTH AT TOP OF THE FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.J-4(B).)

J-4(B). Is this the same amount that you received towards family expenses for each of the last 6 months?

Yes ... 1 → SKIP TO Q.J-5(A)

No ... 2 → **ASK SPECIFIC AMOUNTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE**

FAMILY INCOME SECTION

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
J-5(A). How much money did you receive from roomers or boarders, *not including* any members of the family, last month? **(MENTION MONTH AT TOP OF THE FIRST COLUMN AND ENTER AMOUNTS IN APPROPRIATE SPACES, THEN ASK Q.J-5(B).)**	$ ☐☐☐ (43-45)	$ ☐☐☐ (46-48)	$ ☐☐☐ (49-51)	$ ☐☐☐ (52-54)	$ ☐☐☐ (55-57)	$ ☐☐☐ (58-60)
J-5(B). Is that the same amount you received during each of the last 6 months? Yes ... 1 → SKIP TO Q.J-6 No ... 2 → **ASK FOR SPECIFIC AMOUNTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE**						

FAMILY INCOME SECTION

J-6. INSTRUCTIONS: ASK BOTH QUESTIONS J-6(A) AND J-6(B) ABOUT EACH SOURCE LISTED BELOW, THEN ASK ABOUT THE NEXT SOURCE.

J-6(A). How much income did you (MOH & WOH together) have from (SOURCE LISTED BELOW) last month?
(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES.)

J-6(B). Is that the same amount that you received from this source during each of the last 6 months?

IF 'YES' DRAW A LINE THROUGH THE SPACES PROVIDED FOR THE OTHER MONTHS LISTED ACROSS THE TOP OF THE PAGE.

IF 'NO' ASK FOR SPECIFIC AMOUNTS FOR EACH MONTH LISTED ACROSS THE TOP OF THE PAGE.

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
(A) Social Security	$☐☐☐ (61-63)	$☐☐☐ (64-66)	$☐☐☐ (67-69)	$☐☐☐ (70-72)	$☐☐☐ (73-75)	START CARD 28 $☐☐☐ (09-11)
(B) Welfare payments or public assistance payments for:						
1) Aid to families with dependent children (AFDC)	$☐☐☐ (12-14)	$☐☐☐ (15-17)	$☐☐☐ (18-20)	$☐☐☐ (21-23)	$☐☐☐ (24-26)	$☐☐☐ (27-29)
2) Supplemental security income (SSI) . . .	$☐☐☐ (30-32)	$☐☐☐ (33-35)	$☐☐☐ (36-38)	$☐☐☐ (39-41)	$☐☐☐ (42-44)	$☐☐☐ (45-47)
3) General assistance	$☐☐☐ (48-50)	$☐☐☐ (51-53)	$☐☐☐ (54-56)	$☐☐☐ (57-59)	$☐☐☐ (60-62)	$☐☐☐ (63-65)
4) Any other assistance from the Department of Welfare	$☐☐☐ (66-68)	$☐☐☐ (69-71)	$☐☐☐ (72-74)	$☐☐☐ (75-77)	START CARD 29 $☐☐☐ (09-11)	$☐☐☐ (12-14)

FAMILY INCOME SECTION

J-6(B). Continued.

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
5) Food stamps:						
(a) How much did you pay for them? . .	$☐☐☐ (15-17)	$☐☐☐ (18-20)	$☐☐☐ (21-23)	$☐☐☐ (24-26)	$☐☐☐ (27-29)	$☐☐☐ (30-32)
(b) What was their buying value?	$☐☐☐ (33-35)	$☐☐☐ (36-38)	$☐☐☐ (39-41)	$☐☐☐ (42-44)	$☐☐☐ (45-47)	$☐☐☐ (48-50)
6) Unemployment benefits	$☐☐☐ (51-53)	$☐☐☐ (54-56)	$☐☐☐ (57-59)	$☐☐☐ (60-62)	$☐☐☐ (63-65)	$☐☐☐ (66-68)
(C) Workmen's compensation, illness or accident benefits or pension from government, private employers, or veterans disability pensions or compensation	$☐☐☐☐ (69-72)	$☐☐☐☐ (73-76)	START CARD 30 $☐☐☐☐ (09-12)	$☐☐☐☐ (13-16)	$☐☐☐☐ (17-20)	$☐☐☐☐ (21-24)
(D) Alimony or child support not included in AFDC	$☐☐☐☐ (25-28)	$☐☐☐☐ (29-32)	$☐☐☐☐ (33-36)	$☐☐☐☐ (37-40)	$☐☐☐☐ (41-44)	$☐☐☐☐ (45-48)
(E) Cash contributions from persons not living in this household or from private charities	$☐☐☐ (49-51)	$☐☐☐ (52-54)	$☐☐☐ (55-57)	$☐☐☐ (58-60)	$☐☐☐ (61-63)	$☐☐☐ (64-66)
(F) Tribal allocations	$☐☐☐☐ (67-70)	$☐☐☐☐ (71-74)	START CARD 31 $☐☐☐☐ (09-12)	$☐☐☐☐ (13-16)	$☐☐☐☐ (17-20)	$☐☐☐☐ (21-24)
(G) Education stipends, scholarships, or GI benefits .	$☐☐☐☐ (25-28)	$☐☐☐☐ (29-32)	$☐☐☐☐ (33-36)	$☐☐☐☐ (37-40)	$☐☐☐☐ (41-44)	$☐☐☐☐ (45-48)
(H) Any other income that we have not talked about? (SPECIFY): ______________________	(49-52) $☐☐☐☐	(53-56) $☐☐☐☐	(57-60) $☐☐☐☐	(61-64) $☐☐☐☐	(65-68) $☐☐☐☐	(69-72) $☐☐☐☐
______________________	$☐☐☐☐ (73-76)	START CARD 32 $☐☐☐☐ (09-12)	$☐☐☐☐ (13-16)	$☐☐☐☐ (17-20)	$☐☐☐☐ (21-24)	$☐☐☐☐ (25-28)

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J-7. Has anyone in your family received free school lunches or free meals for the elderly during the last 6 months?

Yes 1
(29-30)
No 2

J-8. During the past 6 months, have any members of your household had any part of their medical expenses covered by Medicaid? Medicaid is a program administered by state welfare departments which covers medical expenses for people whose income is low enough to make them eligible.

Yes 1
(31-32)
No 2

CREDIT AND DEBTS SECTION

INTRODUCTION: **Now I would like to ask you a few questions about the use of credit and any debts the family may have.**

K-1. Do any other members of the family have any credit cards – like Master Charge; Bankamericard, gasoline credit cards, or department store charge cards?

Yes 1
(33-34)
No 2

K-2. Do members of the family have a *checking* account?

Yes 1
(35-36)
No 2

K-3A. Do any members of the family have a *savings* account?

Yes 1
(37-38)
No . . . . 2 ➡ SKIP TO Q.K-4.

K-3B. How much money does the family have in savings accounts now?

$ ☐☐☐☐ (39-42)

☐ Check here if R's refuse to answer

K-4. Do any members of your household owe any money . . . . (READ ITEMS BELOW)

FOR EACH "YES" ASK Q's K-5 & K-6.

	K-4.	K-5. Altogether, how much do you owe now?	K-6. Are you behind in any payments?
(A) For car payments?	Yes . . . 1 No . . . 2 (43-44)	(45-48) (A) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (49-50)
(B) For loans from banks, credit unions, or savings and loan associations (not including car payments)?	Yes . . . 1 No . . . 2 (51-52)	(53-56) (B) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (57-58)
(C) For loans from finance companies (not including car payments)?	Yes . . . 1 No . . . 2 (59-60)	(61-64) (C) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (65-66)
(D) To stores – discount, furniture, appliance, department or other stores – for things bought *on time or installment* payments?	Yes . . . 1 No . . . 2 (67-68)	(69-72) (D) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (73-74)
(E) To your landlord, employer or friends?	Yes . . . 1 No . . . 2 (75-76)	START CARD 33 (09-12) (E) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (13-14)
(F) For hospital bills?	Yes . . . 1 No . . . 2 (15-16)	(17-20) (F) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (21-22)
(G) To doctors or dentists?	Yes . . . 1 No . . . 2 (23-24)	(25-28) (G) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (29-30)
(H) For anything else I haven't mentioned? Include only installment or time payments for things being financed. SPECIFY: 1 ______	Yes . . . 1 No . . . 2 (31-32)	(H) (33-36) (1) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (37-38)
2 ______	Yes . . . 1 No . . . 2 (39-40)	(41-44) (2) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (45-46)
3 ______	Yes . . . 1 No . . . 2 (47-48)	(49-52) (3) $ ☐☐☐☐	Yes . . . 1 No . . . 2 (53-54)

K-7. Do you or anyone in your household own a motorcycle, a car or a truck in working condition? Do not include leased or company cars and trucks.

Yes . . . 1

No . . . 2 → (55-56) SKIP TO COST OF LIVING SECTION ON PAGE 63.

K-8. How many motorcycles, cars or trucks do you (or members of your household) own?

(57-58) ☐☐ cars

(59-60) ☐☐ motorcycles

(61-62) ☐☐ trucks

COST OF LIVING SECTION

INTRODUCTION: Now I would like to ask you some questions about how much it has cost you to live during the last 6 months.

	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
L-1(A). How much did you spend *per week* on food last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-1(B).)	(63-65) $☐☐☐ per week	(66-68) $☐☐☐ per week	(69-71) $☐☐☐ per week	(72-74) $☐☐☐ per week	(75-77) $☐☐☐ per week	START CARD 34 (09-11) $☐☐☐ per week
L-1(B). Is that the same as you spent *per week* on food during each of the last 6 months? Yes ... 1 → SKIP TO Q.L-2(A) No ... 2 → ASK FOR SPECIFIC AMOUNTS SPENT PER WEEK FOR FOOD FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						
L-2(A). How much did you spend *per week* on cigarettes, tobacco, and alcoholic beverages last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-2(B).)	(12-14) $☐☐☐ per week	(15-17) $☐☐☐ per week	(18-20) $☐☐☐ per week	(21-23) $☐☐☐ per week	(24-26) $☐☐☐ per week	(27-29) $☐☐☐ per week
L-2(B). Is that the same as you spent *per week* on cigarettes, tobacco, and alcohol during each of the last 6 months? Yes ... 1 → SKIP TO Q.L-3(A) No ... 2 → ASK FOR SPECIFIC AMOUNTS SPENT PER WEEK FOR CIGARETTES, ALCOHOL AND TOBACCO FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

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COST OF LIVING SECTION

	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
L-3(A). How much did you pay out for car payments last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-3(B).)	$☐☐☐ (30-32)	$☐☐☐ (33-35)	$☐☐☐ (36-38)	$☐☐☐ (39-41)	$☐☐☐ (42-44)	$☐☐☐ (45-47)
L-3(B). Is that the same as you paid out per month on car payments during each of the last 6 months? Yes ... 1 → SKIP TO Q.L-4(A) No ... 2 → ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR CAR PAYMENTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						
L-4(A). How much did you pay out for child care (day-care, babysitting) last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-4(B).)	$☐☐☐ (48-50)	$☐☐☐ (51-53)	$☐☐☐ (54-56)	$☐☐☐ (57-59)	$☐☐☐ (60-62)	$☐☐☐ (63-65)
L-4(B). Is that the same as you paid out per month on child care during each of the last 6 months? Yes ... 1 → SKIP TO Q.L-5(A) No ... 2 → ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR CHILD CARE (DAYCARE, BABY-SITTING) FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

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COST OF LIVING SECTION

	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
L-5(A). How much did you pay out for payments on credit cards last month? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-5(B).)** L-5(B). Is that the same as you paid out per month on payments on credit cards during each of the last 6 months? Yes . . . 1 → SKIP TO Q.L-6(A) No . . . 2 → **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR PAYMENTS ON CREDIT CARDS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**	$ ☐☐☐☐ (66-69)	$ ☐☐☐☐ (70-73)	$ ☐☐☐☐ (74-77)	START CARD 35 $ ☐☐☐☐ (09-12)	$ ☐☐☐☐ (13-16)	$ ☐☐☐☐ (17-20)
L-6(A). How much did you pay out for all loans and installment purchases, other than credit cards last month? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-6(B).)** L-6(B). Is that the same as you paid out per month on all loans and installment purchases, other than credit cards during each of the last 6 months? Yes . . . 1 → SKIP TO Q.L-7(A) No . . . 2 → **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR ALL LOANS AND INSTALLMENT PURCHASES, OTHER THAN CREDIT CARDS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**	$ ☐☐☐☐ (21-24)	$ ☐☐☐☐ (25-28)	$ ☐☐☐☐ (29-32)	$ ☐☐☐☐ (33-36)	$ ☐☐☐☐ (37-40)	$ ☐☐☐☐ (41-44)

COST OF LIVING SECTION	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
L-7(A). How much did you pay out for recreation and entertainment last month? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-7(B).)**	$ ☐☐☐ (45-47)	$ ☐☐☐ (48-50)	$ ☐☐☐ (51-53)	$ ☐☐☐ (54-56)	$ ☐☐☐ (57-59)	$ ☐☐☐ (60-62)
L-7(B). Is that the same as you paid out per month on recreation and entertainment during each of the last 6 months? Yes . . . 1 ➔ SKIP TO Q.L-8(A) No . . . 2 ➔ **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR RECREATION AND ENTERTAINMENT FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**						
L-8(A). How much did you pay out for insurance payments — — life insurance or car insurance last month? Do *not* include homeowner's insurance. **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-8(B).)**	$ ☐☐☐ (63-65)	$ ☐☐☐ (66-68)	$ ☐☐☐ (69-71)	$ ☐☐☐ (72-74)	$ ☐☐☐ (75-77)	START CARD 36 $ ☐☐☐ (09-11)
L-8(B). Is that the same as you paid out per month on insurance payments — — life insurance or car insurance during each of the last 6 months? Yes . . . 1 ➔ SKIP TO Q.L-9(A) No . . . 2 ➔ **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR INSURANCE FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**						

COST OF LIVING SECTION	1 Last Month (___/___) mo. yr.	2 The Month Before That (___/___) mo. yr.	3 The Month Before That (___/___) mo. yr.	4 The Month Before That (___/___) mo. yr.	5 The Month Before That (___/___) mo. yr.	6 The Month Before That (___/___) mo. yr.
L-9(A). How much did you pay out for transportation costs like gasoline for your car, bus fare, car repairs, and so forth last month. Do *not* include car payments or insurance. **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-9(B).)**	$☐☐☐ (12-14)	$☐☐☐ (15-17)	$☐☐☐ (18-20)	$☐☐☐ (21-23)	$☐☐☐ (24-26)	$☐☐☐ (27-29)
L-9(B). Is that the same as you paid out per month on transportation costs during each of the last 6 months? Yes ... 1 → **SKIP TO Q.L-10(A)** No ... 2 → **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR TRANSPORTATION COSTS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**						
L-10(A). How much did you put into savings last month? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-10(B).)**	$☐☐☐ (30-32)	$☐☐☐ (33-35)	$☐☐☐ (36-38)	$☐☐☐ (39-41)	$☐☐☐ (42-44)	$☐☐☐ (45-47)
L-10(B). Is that the same you put into savings during each of the last 6 months? Yes ... 1 → **SKIP TO Q.L-11(A)** No ... 2 → **ASK FOR SPECIFIC AMOUNTS PUT INTO SAVINGS FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**						

COST OF LIVING SECTION	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
L-11(A). How much did you pay out for clothing last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-11(B).)	$ ☐☐☐ (48-50)	$ ☐☐☐ (51-53)	$ ☐☐☐ (54-56)	$ ☐☐☐ (57-59)	$ ☐☐☐ (60-62)	$ ☐☐☐ (63-65)
L-11(B). Is that the same as you paid out for clothing during each of the last 6 months? Yes . . . 1 → SKIP TO Q.L-12(A) No . . . 2 → ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR CLOTHING FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						
L-12(A). How much did you pay out for medical expenses, including hospital, doctor or dentist bills, and medicine last month? (MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-12(B).)	$ ☐☐☐ (66-68)	$ ☐☐☐ (69-71)	$ ☐☐☐ (72-74)	$ ☐☐☐ (75-77)	START CARD 37 $ ☐☐☐ (09-11)	$ ☐☐☐ (12-14)
L-12(B). Is that the same as you paid out for medical expenses during each of the last 6 months? Yes . . . 1 → SKIP TO Q.L-13(A) No . . . 2 → ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR MEDICAL EXPENSES FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.						

	1 Last Month (/) mo. yr.	2 The Month Before That (/) mo. yr.	3 The Month Before That (/) mo. yr.	4 The Month Before That (/) mo. yr.	5 The Month Before That (/) mo. yr.	6 The Month Before That (/) mo. yr.
L-13(A). How much did you pay out for education expenses last month? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-13(B).)** L-13(B). Is that the same as you paid out for education expenses during each of the last 6 months? Yes ... 1 → **SKIP TO Q.L-14(A)** No ... 2 → **ASK FOR SPECIFIC AMOUNTS PAID OUT PER MONTH FOR EDUCATION EXPENSES FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**	$☐☐☐ (15-17)	$☐☐☐ (18-20)	$☐☐☐ (21-23)	$☐☐☐ (24-26)	$☐☐☐ (27-29)	$☐☐☐ (30-32)
L-14(A). Altogether, about how much did the family pay out last month for other living expenses that we haven't already talked about? **(MENTION MONTH AT TOP OF FIRST COLUMN AND ENTER AMOUNT IN APPROPRIATE SPACES, THEN ASK Q.L-14(B).)** L-14(B). Is that the same amount that you paid out for these other expenses during each of the last 6 months? Yes ... 1 → **SKIP TO Q.M-1** No ... 2 → **ASK FOR SPECIFIC AMOUNTS PAID OUT FOR OTHER EXPENSES FOR EACH MONTH LISTED AT THE TOP OF THE PAGE.**	$☐☐☐☐ (33-36)	$☐☐☐☐ (37-40)	$☐☐☐☐ (41-44)	$☐☐☐☐ (45-48)	$☐☐☐☐ (49-52)	$☐☐☐☐ (53-56)

ETHNICITY OF MOH AND WOH

M-1. Mr. (NAME OF MOH), what ethnic or racial group are you a member of? (57-58)

White	1
Mexican-American	2
Black/Negro	3
American Indian	4
Other (SPECIFY): ____________ ____________	5

M-2. Mrs. (NAME OF WOH), what ethnic or racial group are you a member of? (59-60)

White	1
Mexican-American	2
Black/Negro	3
American Indian	4
Other (SPECIFY): ____________ ____________	5

IF THIS QUESTIONNAIRE IS ON *WHITE* PAPER, ADMINISTER THE SUPPLEMENT FOR PARTICIPANT FAMILIES (WHICH IS BOUND SEPARATELY), AND THEN GO TO THE INSTRUCTIONS FOR THE PERSONAL SUPPLEMENT.

IF THIS QUESTIONNAIRE IS ON *TAN* PAPER, GO DIRECTLY TO THE INSTRUCTIONS FOR THE PERSONAL SUPPLEMENT.

INSTRUCTIONS FOR PERSONAL SUPPLEMENT

THE PERSONAL SUPPLEMENT IS SELF ADMINISTERED. HAND A SUPPLEMENT TO THE MAN-OF-THE-HOUSEHOLD AND ONE TO THE WOMAN-OF-THE-HOUSEHOLD ALONG WITH PENCILS FOR THEM TO USE TO COMPLETE THE SUPPLEMENTS.

SAY: Finally, I'd like (each of) you to fill out this questionnaire. Please read and follow the instructions carefully. It will take about half-an-hour to complete. Also, please don't discuss the questions or your answers with each other until you have both completed the supplement.

WHILE THE MOH AND WOH ARE COMPLETING THE PERSONAL SUPPLEMENT, USE THE TIME TO CAREFULLY CHECK THROUGH THE INTERVIEW PROTOCOL TO SEE THAT ALL APPROPRIATE QUESTIONS HAVE BEEN ANSWERED, AND YOU HAVE COMPLETED THE INTERVIEW CORRECTLY.

INTERVIEWER OBSERVATIONS & REMARKS

INSTRUCTIONS: **FILL THIS SECTION OUT AFTER YOU LEAVE THE HOUSEHOLD.**

P-1. Was the MOH present during the interview?

Yes 1
(61-62)
No . . . . 2 }
No MOH 3 } → SKIP TO Q.P-3.

P-2. Did the MOH use a language *other* than English at any time during the interview?

Yes 1
(63-64)
No 2

P-3. Was the WOH present during the interview?

Yes 1
(65-66)
No . . . . . 2 }
No WOH . 3 } → SKIP TO Q.P-5.

P-4. Did the WOH use a language *other* than English at any time during the interview?

Yes 1
(67-68)
No 2

P-5. Is there anything else you think we should know about this household which is not covered in the questionnaire?

Abt Associates Inc.
55 Wheeler Street
Cambridge, Massachusetts 02138

OMB #051-R1099

Personal Supplement

FOLLOW-UP STUDY of the MOUNTAIN-PLAINS EDUCATION AND ECONOMIC DEVELOPMENT PROGRAM

PARTICIPANT AND CONTROL GROUP FAMILIES

Dear Respondent:

This supplement asks you to give to us your personal feelings about four things:

(1) Your family;
(2) Your community;
(3) Your current or most recent job; and
(4) Yourself

Of course there are no right or wrong answers to any of the questions that follow. We are, however, very interested in how *you personally* feel about these things. So please be sure to answer all the questions. It will probably take you about 20-30 minutes to complete the form.

Please check below whether you are the Man of the House or the Woman of the House. Then go on to fill in the questionnaire.

○ **Man of House**

○ **Woman of House**

Family I.D.

FAMILY DESCRIPTION

INSTRUCTIONS

THE FOLLOWING STATEMENTS FIT SOME FAMILIES BETTER THAN OTHERS. PLEASE DESCRIBE YOUR FAMILY BY CIRCLING THE NUMBER BESIDE EACH STATEMENT THAT INDICATES HOW WELL THE STATEMENT FITS YOUR FAMILY.

IN COMPLETING THIS SECTION, PLEASE THINK OF YOUR "FAMILY" AS BEING MADE UP OF YOU, YOUR HUSBAND OR WIFE (IF YOU ARE MARRIED AND LIVING TOGETHER), AND YOUR CHILDREN (IF YOU HAVE ANY). DO NOT INCLUDE OTHER RELATIVES (SUCH AS YOUR PARENTS) UNLESS THEY ARE LIVING WITH YOU, OR YOU ARE LIVING WITH THEM.

	Does Not Fit Our Family At All	**Fits Our Family A Little**	**Fits Our Family Some**	**Fits Our Family Pretty Well**	**Fits Our Family Very Well**	
1. We live in a good neighborhood	1	2	3	4	5	(09-10)
2. Our family talks things out	1	2	3	4	5	(11-12)
3. We have a sense of humor	1	2	3	4	5	(13-14)
4. Our family budgets its money very carefully	1	2	3	4	5	(15-16)
5. Members of our family never get involved in community affairs	1	2	3	4	5	(17-18)
6. There is an opportunity for each member to express himself in his own way	1	2	3	4	5	(19-20)
7. There are activities which we all enjoy doing together	1	2	3	4	5	(21-22)
8. In our family, children are to be seen and not heard	1	2	3	4	5	(23-24)
9. When there is an important family decision to be made there is usually a big argument about what we should do	1	2	3	4	5	(25-26)
10. Our family takes a lot of pride in how well we take care of the place we live in	1	2	3	4	5	(27-28)
11. Our family is a happy one	1	2	3	4	5	(29-30)

	Does Not Fit Our Family At All	Fits Our Family A Little	Fits Our Family Some	Fits Our Family Pretty Well	Fits Our Family Very Well	
12. Members of our family often get very angry with each other	1	2	3	4	5	(31-32)
13. Our family members have good friends	1	2	3	4	5	(33-34)
14. We respect each other's feelings	1	2	3	4	5	(35-36)
15. In our home, we feel loved	1	2	3	4	5	(37-38)
16. Our family never bothers to plan for the future	1	2	3	4	5	(39-40)
17. Children in our family are punished every time they don't do something right	1	2	3	4	5	(41-42)
18. We have the right kinds of friends	1	2	3	4	5	(43-44)
19. Only certain kinds of ideas may be expressed freely	1	2	3	4	5	(45-46)
20. There is a strong sense of belonging in our family	1	2	3	4	5	(47-48)
21. Our family is a reliable, dependable family	1	2	3	4	5	(49-50)
22. In times of trouble our family seems to fall apart	1	2	3	4	5	(51-52)
23. We set reasonable goals for ourselves	1	2	3	4	5	(53-54)
24. We encourage development of potential in all members of our family	1	2	3	4	5	(55-56)
25. Understanding and sympathy come easy in our family	1	2	3	4	5	(57-58)
26. We have many outside interests and activities	1	2	3	4	5	(59-60)
27. Deciding how to spend our money often causes an argument.	1	2	3	4	5	(61-62)
28. All the members of the family who are old enough pitch in and help with household chores	1	2	3	4	5	(63-64)
29. We trust each other	1	2	3	4	5	(65-66)
30. In our family children obey parents	1	2	3	4	5	(67-68)
31. If members of our family are unhappy with each other, they talk it out	1	2	3	4	5	(69-70)

	Does Not Fit Our Family At All	Fits Our Family A Little	Fits Our Family Some	Fits Our Family Pretty Well	Fits Our Family Very Well	
32. Members fear to express their real opinions	1	2	3	4	5	(71-72)
33. There is frequent laughter in our family	1	2	3	4	5	(73-74)
34. There is strict discipline	1	2	3	4	5	(75-76)
35. We just cannot tell each other our real feelings	1	2	3	4	5	(09-10)
36. Good manners and proper behavior are very important to us	1	2	3	4	5	(11-12)
37. Members of our family enjoy spending time together	1	2	3	4	5	(13-14)
38. We have very good times together	1	2	3	4	5	(15-16)
39. We can get mad at each other but it doesn't last long	1	2	3	4	5	(17-18)
40. We need each other	1	2	3	4	5	(19-20)
41. We are a strong, competent family	1	2	3	4	5	(21-22)
42. Children in our family are treated fairly	1	2	3	4	5	(23-24)
43. We are satisfied with the way we now live	1	2	3	4	5	(25-26)
44. We forgive each other easily	1	2	3	4	5	(27-28)
45. We can adjust well to new situations	1	2	3	4	5	(29-30)
46. We are not as happy as I would like	1	2	3	4	5	(31-32)
47. If we have a problem, members of the family really pull together to help solve it	1	2	3	4	5	(33-34)
48. There are serious differences in our standards and values	1	2	3	4	5	(35-36)
49. We accept each other's friends	1	2	3	4	5	(37-38)
50. Our family life follows a regular schedule	1	2	3	4	5	(39-40)
51. We like to get together with relatives	1	2	3	4	5	(41-42)

COMMUNITY PARTICIPATION AND SATISFACTION

INSTRUCTIONS

THIS SECTION ASKS YOU TO DESCRIBE HOW MUCH YOU PARTICIPATE IN, AND HOW YOU FEEL ABOUT, VARIOUS ASPECTS OF THE COMMUNITY YOU LIVE IN.

CIRCLE THE RESPONSE AFTER EACH QUESTION THAT BEST DESCRIBES HOW YOU FEEL, OR WHAT YOU HAVE DONE.

1. Do any children from your family go to elementary or secondary schools in this community?

    1 Yes

    2 No → (43-44) GO TO QUESTION 7

2. How important to you is the education your children receive?

    5 Very *Important*
    4 Pretty *Important*
    3 Kind of *Important* (45-46)
    2 A Little *Important*
    1 Not *Important*

3. How satisfied are you with the education your children are getting?

    5 Very *Satisfied*
    4 Pretty *Satisfied*
    3 Kind of *Satisfied* (47-48)
    2 Very Little *Satisfied*
    1 Not *Satisfied at all*

4. How are your children doing in school?

    3 Very Good
    2 Okay (49-50)
    1 Poor

5. Do you feel your children are treated as well in school as most other children?

    5 Yes, All *the Time*
    4 Yes, Most *of the Time* (51-52)
    3 *About* Half-and-Half
    2 No, Most *of the Time*
    1 Never

6. During the last six months, have you participated in any activities that have to do with the community schools – such as PTA, meetings with teachers, or going to school ball games?

    1 Yes

    2 No (53-54)

7. How important to you are the health services available in your community?

    5 Very *Important*
    4 Pretty *Important*
    3 Kind of *Important* (55-56)
    2 A Little *Important*
    1 Not *Important*

8. During the last six months, have members of your family used any health services like doctors, dentists, clinics or hospitals?

    1 Yes

    2 No (57-58)

9. How satisfied are you with the health care that you and your family get in this community?

    5 Very *Satisfied*
    4 Pretty *Satisfied*
    3 Kind of *Satisfied* (59-60)
    2 Very Little *Satisfied*
    1 Not *Satisfied at all*

10. Do you feel that you and your family are treated as well as most other families in this community when you go to a doctor or hospital?

    5 Yes, All *the Time*
    4 Yes, Most *of the Time*
    3 *About* Half-and-Half (61-62)
    2 No, Most *of the Time*
    1 Never

11. How important are local government affairs to you?

    5 Very *Important*
    4 Pretty *Important*
    3 Kind of *Important* (63-64)
    2 A Little *Important*
    1 Not *Important*

12. During the past six months, have you actively taken part in local government affairs by attending meetings, working for candidates, circulating petitions, or personally contacting local government officials?

1 Yes
(65-66)
2 No

13. How satisfied are you with local government in your community?

5 Very *Satisfied*
4 Pretty *Satisfied*
3 Kind of *Satisfied* (67-68)
2 Very Little *Satisfied*
1 Not *Satisfied at all*

14. Do you feel that your family is treated as well as most other families in the community by local government agencies?

5 Yes, All *the Time*
4 Yes, Most *of the Time*
3 *About* Half-and-Half (69-70)
2 No, Most *of the Time*
1 Never

15. How important to you and your family are public recreation facilities such as parks, campsites, ball fields, public swimming pools, and so forth?

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (71-72)
2 A Little *Important*
1 Not *Important*

16. During the past six months have you used any public recreation facilities?

1 Yes
(73-74)
2 No

17. How satisfied are you with the recreation facilities available to you in this community?

5 Very *Satisfied*
4 Pretty *Satisfied*
3 Kind of *Satisfied* (75-76)
2 Very Little *Satisfied*
1 Not *Satisfied at all*

18. Do you feel that your family has the same chance to use recreation facilities as most other families in this community?

5 Yes, All *the Time*
4 Yes, Most *of the Time*
3 *About* Half-and-Half (09-10)
2 No, Most *of the Time*
1 Never

19. How often do you read about local or national affairs in a newspaper?

5 *Nearly* Every Day
4 *A* Couple Days *a* Week (11-12)
3 *A* Few Times *a* Month
2 *About* 2 *or* 3 Times *a* Month
1 Never *or almost never*

20. How often do you read a magazine?

5 *Nearly* Every Day
4 *A* Couple Days *a* Week
3 *A* Few Times *a* Month (13-14)
2 *About* 2 *or* 3 Times *a* Month
1 Never *or almost never*

21. How often do you listen to the news on the radio?

5 *Nearly* Every Day
4 *A* Couple Days *a* Week
3 *A* Few Times *a* Month (15-16)
2 *About* 2 *or* 3 Times *a* Month
1 Never *or almost never*

22. How often do you watch the news on TV?

5 *Nearly* Every Day
4 *A* Couple Days *a* Week
3 *A* Few Times *a* Month (17-18)
2 *About* 2 *or* 3 Times *a* Month
1 Never *or almost never*

23. How often do you use any of the following means of transportation?

a) Family car, truck or motorcycle,

5 Very *Often*
4 Pretty *Often*
3 Sometimes (19-20)
2 Very *Little*
1 Never *or almost never*

b) Car pool or ride with a friend or neighbor

5 Very *Often*
4 Pretty *Often*
3 Sometimes (21-22)
2 Very *Little*
1 Never *or almost never*

c) Public transportation (bus, train, etc.)

5 Very *Often*
4 Pretty *Often*
3 Sometimes (23-24)
2 Very *Little*
1 Never *or almost never*

d) Hitchhike

5 Very *Often*
4 Pretty *Often*
3 Sometimes (25-26)
2 Very *Little*
1 Never *or almost never*

24. How often do you or members of your family have any contact with the police or the courts in your community?

5 Very *Often*
4 Pretty *Often*
3 Sometimes (27-28)
2 Very *Little*
1 Never *or almost never*

25. Do you feel that membets of your family are, or would be, treated fairly by the police and the courts of the community?

5 Yes, All *the Time*
4 Yes, Most *of the Time*
3 *About* Half-and-Half (29-30)
2 No, Most *of the Time*
1 Never

26. How important do you think each of the following things is in getting a job?

a) Education and training

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (31-32)
2 A Little *Important*
1 Not *Important*

b) Work experience

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (33-34)
2 A Little *Important*
1 Not *Important*

c) Personal appearance

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (35-36)
2 A Little *Important*
1 Not *Important*

26. (Continued.) How important do you think each of the following things is in getting a job?

d) Job placement assistance

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (37-38)
2 A Little *Important*
1 Not *Important*

e) Race or ethnic background

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (39-40)
2 A Little *Important*
1 Not *Important*

f) Connections and knowing the right people

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (41-42)
2 A Little *Important*
1 Not *Important*

g) Luck

5 Very *Important*
4 Pretty *Important*
3 Kind of *Important* (43-44)
2 A Little *Important*
1 Not *Important*

27. How easy is it for you to get to places you want or need to go?

a) I can get to my *job:*

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (45-46)
2 *With* a lot of *Difficulty*
1 *Does not apply*

b) I can get to *stores* and *shopping places:*

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (47-48)
2 *With* a lot of *Difficulty*
1 I *can't get there* at all

c) I can get to *medical care,* if I need it:

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (49-50)
2 *With* a lot of *Difficulty*
1 I *can't get there* at all

d) I can get to *social service agencies* such as the Welfare office:

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (51-52)
2 *With* a lot of *Difficulty*
1 I *can't get there* at all

e) I can get to places of entertainment:

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (53-54)
2 *With* a lot of *Difficulty*
1 I *can't get there* at all

f) I can get to the church of my choice:

5 Very *Easily*
4 Fairly *Easily*
3 *With* Some *Difficulty* (55-56)
2 *With* a lot of *Difficulty*
1 I *can't get there* at all

28. During the last six months, have you attended any meetings of civic organizations such as a youth organization, a fraternal order, a civil rights group, or the like?

1 Yes
2 No (57-58)

JOB DESCRIPTION

INSTRUCTIONS

THIS SECTION ASKS YOU TO DESCRIBE THE JOB YOU HAVE NOW, OR THE JOB YOU HAD LAST IF YOU ARE NOT EMPLOYED RIGHT NOW, IN TERMS OF WORK, SUPERVISION, PAY, PROMOTIONS AND CO-WORKERS.

IF YOU ARE A HOUSEWIFE AND ARE NOT EMPLOYED OUTSIDE OF YOUR HOUSEHOLD, PLEASE DESCRIBE YOUR JOB AS HOUSEWIFE.

FOR EACH ASPECT OF YOUR JOB LISTED BELOW:

CIRCLE "YES" IF THE WORD OR PHASE DESCRIBES THAT ASPECT OF YOUR JOB.

CIRCLE "NO" IF THE WORD OR PHRASE DOES NOT DESCRIBE YOUR JOB.

CIRCLE "?" IF YOU CAN'T DECIDE WHETHER OR NOT THE WORD OR PHRASE DESCRIBES YOUR JOB.

DO THESE WORDS DESCRIBE THE WORK YOU DO ON YOUR JOB?

1. Fascinating ..... YES . . . NO . . . ? (59-60)
2. Routine .... YES . . . NO . . . ? (61-62)
3. Satisfying ..... YES . . . NO . . . ? (63-64)
4. Boring .... YES . . . NO . . . ? (65-66)
5. Good .... YES . . . NO . . . ? (67-68)
6. Creative .... YES . . . NO . . . ? (69-70)
7. Respected ..... YES . . . NO . . . ? (71-72)
8. Hot .... YES . . . NO . . . ? (73-74)
9. Pleasant .... YES . . . NO . . . ? (75-76)
10. Useful .... YES . . . NO . . . ? (09-10)
11. Tiresome .... YES . . . NO . . . ? (11-12)
12. Healthful .... YES . . . NO . . . ? (13-14)
13. Challenging ..... YES . . . NO . . . ? (15-16)
14. On your feet ... YES . . . NO . . . ? (17-18)
15. Frustrating ..... YES . . . NO . . . ? (19-20)
16. Simple .... YES . . . NO . . . ? (21-22)
17. Endless .... YES . . . NO . . . ? (23-24)
18. Gives sense of accomplishment . YES . . . NO . . . ? (25-26)

If you are a housewife check here ○ and turn to page 12. (27-28)

DO THESE WORDS DESCRIBE THE SUPERVISION ON YOUR JOB?

1. Asks my advice .. YES . . . NO . . . ? (29-30)
2. Hard to please .... YES . . . NO . . . ? (31-32)
3. Impolite .... YES . . . NO . . . ? (33-34)
4. Praises good work . YES . . . NO . . . ? (35-36)
5. Tactful .... YES . . . NO . . . ? (37-38)
6. Influential ...... YES . . . NO . . . ? (39-40)
7. Up-to-date ...... YES . . . NO . . . ? (41-42)
8. Doesn't supervise enough .... YES . . . NO . . . ? (43-44)
9. Quick tempered .. YES . . . NO . . . ? (45-46)
10. Tells me where I stand .... YES . . . NO . . . ? (47-48)
11. Annoying ...... YES . . . NO . . . ? (49-50)
12. Stubborn .... YES . . . NO . . . ? (51-52)
13. Knows job well .. YES . . . NO . . . ? (53-54)
14. Bad .... YES . . . NO . . . ? (55-56)
15. Intelligent ...... YES . . . NO . . . ? (57-58)
16. Leaves me on my own .... YES . . . NO . . . ? (59-60)
17. Lazy .... YES . . . NO . . . ? (61-62)
18. Around when needed .... YES . . . NO . . . ? (63-64)

DO THESE WORDS DESCRIBE THE PAY YOU GET FROM YOUR JOB?

1. Income adequate for normal expenses .... YES ... NO ... ? (65-66)
2. Satisfactory profit sharing .... YES ... NO ... ? (67-68)
3. Barely live on income .... YES ... NO ... ? (69-70)
4. Bad .... YES ... NO ... ? (71-72)
5. Income provides luxuries .... YES ... NO ... ? (73-74)
6. Insecure .... YES ... NO ... ? (75-76)
7. Less than I deserve .... YES ... NO ... ? (77-78)
8. Highly paid ...... YES ... NO ... ? (79-80)
9. Underpaid ...... YES ... NO ... ? (09-10)

DO THESE WORDS DESCRIBE PROMOTIONS ON YOUR JOB?

1. Good opportunity for advancement .. YES ... NO ... ? (11-12)
2. Opportunity somewhat limited .... YES ... NO ... ? (13-14)
3. Promotion on ability .... YES ... NO ... ? (15-16)
4. Dead-end job .... YES ... NO ... ? (17-18)
5. Good chance for promotion ...... YES ... NO ... ? (19-20)
6. Unfair promotion policy .... YES ... NO ... ? (21-22)
7. Infrequent promotions ...... YES ... NO ... ? (23-24)
8. Regular promotions ...... YES ... NO ... ? (25-26)
9. Fairly good chance for promotion .... YES ... NO ... ? (27-28)

DO THESE WORDS DESCRIBE THE CO-WORKERS ON YOUR JOB?

1. Stimulating ...... YES ... NO ... ? (29-30)
2. Boring .... YES ... NO ... ? (31-32)
3. Slow .... YES ... NO ... ? (33-34)
4. Ambitious ...... YES ... NO ... ? (35-36)
5. Stupid .... YES ... NO ... ? (37-38)
6. Responsible ...... YES ... NO ... ? (39-40)
7. Fast .... YES ... NO ... ? (41-42)
8. Intelligent ...... YES ... NO ... ? (43-44)
9. Easy to make enemies .... YES ... NO ... ? (45-46)
10. Talk too much .... YES ... NO ... ? (47-48)
11. Smart .... YES ... NO ... ? (49-50)
12. Lazy .... YES ... NO ... ? (51-52)
13. Unpleasant ...... YES ... NO ... ? (53-54)
14. No privacy ...... YES ... NO ... ? (55-56)
15. Active .... YES ... NO ... ? (57-58)
16. Narrow interests .. YES ... NO ... ? (59-60)
17. Loyal .... YES ... NO ... ? (61-62)
18. Hard to meet .... YES ... NO ... ? (63-64)

SELF DESCRIPTION

INSTRUCTIONS

THIS SECTION ASKS YOU TO DESCRIBE YOURSELF BY INDICATING WHICH OF THE TWO STATEMENTS IN EACH PAIR LISTED BELOW IS *MOST* LIKE YOU.

PLEASE MAKE A CHOICE FOR EACH PAIR OF STATEMENTS EVEN IF NEITHER SENTENCE DESCRIBES YOU EXACTLY.

CHECK THE BOX BESIDE THE ONE STATEMENT IN EACH PAIR THAT IS *MOST* LIKE YOU.

1. (65-66)
[1] I think good luck is just as important as hard work for success.
[2] I think being a success is mainly a matter of hard work, and luck has little or nothing to do with it.

2. (67-68)
[1] Very often when I try to get ahead, something or somebody stops me.
[2] When I try to get ahead and don't make it, it's because I didn't try hard enough.

3. (69-70)
[1] When I make plans, I am almost certain that I can make them work.
[2] When I make plans, I am pretty sure something I can't control will foul them up.

4. (71-72)
[1] Anyone who wants to really try has a very good chance of being a success.
[2] People like me don't have much of a chance to be really successful in life.

5. (73-74)
[1] I am responsible for most of the good things that happen to me.
[2] Good things that happen to me are just a matter of good luck.

6. (75-76)
[1] Bad things that happen to me are due to bad luck.
[2] I am responsible for bad things that happen to me.

7. (77-78)
[1] I feel I must always tell the truth.
[2] I do not always tell the truth.

8. (79-80)
[1] I feel that I must strive for perfection in everything that I undertake.
[2] I do not feel that I must strive for perfection in everything that I undertake.

9. (09-10)
[1] I am afraid to be myself.
[2] I am not afraid to be myself.

10. (11-12)
[1] I feel guilty when I am selfish.
[2] I don't feel guilty when I am selfish.

11. (13-14)
[1] For me, anything is possible if I believe in myself.
[2] I have a lot of natural limitations even though I believe in myself.

12. (15-16)
[1] I sometimes feel embarrassed by compliments.
[2] I am not embarrassed by compliments.

13. (17-18)
[1] I do what others expect of me.
[2] I feel free to not do what others expect of me.

14. (19-20)
[1] Sometimes I am cross when I am not feeling well.
[2] I am hardly ever cross.

15. (21-22)
[1] I am afraid of making mistakes.
[2] I am not afraid of making mistakes.

16. (23-24)
[1] My feelings of self-worth depend on how much I accomplish.
[2] My feelings of self-worth do not depend on how much I accomplish.

17. (25-26)
[1] I fear failure.
[2] I don't fear failure.

18. (27-28)
[1] It is possible to live life in terms of what I want to do.
[2] It is not possible to live life in terms of what I want to do.

19. (29-30)
[1] I can cope with the ups and downs of life.
[2] I cannot cope with the ups and downs of life.

20. (31-32)
[1] I find that I have rejected many of the moral values I was taught.
[2] I have not rejected any of the moral values I was taught.

21. (33-34)
[1] I trust my ability to size up a situation.
[2] I do not trust my ability to size up a situation.

22. (35-36)

$\boxed{1}$ I believe I have an innate capacity to cope with life.

$\boxed{2}$ I do not believe I have an innate capacity to cope with life.

23. (37-38)

$\boxed{1}$ I must justify my actions in the pursuit of my own interests.

$\boxed{2}$ I need not justify my actions in the pursuit of my own interests.

24. (39-40)

$\boxed{1}$ I am bothered by fears of being inadequate.

$\boxed{2}$ I am not bothered by fears of being inadequate.

25. (41-42)

$\boxed{1}$ I often feel it necessary to defend my past actions.

$\boxed{2}$ I do not feel it necessary to defend my past actions.

26. (43-44)

$\boxed{1}$ Criticism threatens my self-esteem.

$\boxed{2}$ Criticism does not threaten my self-esteem.

27. (45-46)

$\boxed{1}$ I welcome criticism as an opportunity for growth.

$\boxed{2}$ I do not welcome criticism as an opportunity for growth.

28. (47-48)

$\boxed{1}$ I hardly ever gossip.

$\boxed{2}$ I gossip a little at times.

29. (49-50)

$\boxed{1}$ I feel free to reveal my weaknesses among friends.

$\boxed{2}$ I do not feel free to reveal my weaknesses among friends.

30. (51-52)

$\boxed{1}$ I feel free to be myself and bear the consequences.

$\boxed{2}$ I do not feel free to be myself and bear the consequences.

31. (53-54)

$\boxed{1}$ I hesitate to show my weaknesses among strangers.

$\boxed{2}$ I do not hesitate to show my weaknesses among strangers.

32. (55-56)

$\boxed{1}$ I will continue to grow only by setting my sights on a high-level, socially approved goal.

$\boxed{2}$ I will continue to grow best by being myself.

33. (57-58)

$\boxed{1}$ I accept inconsistencies within myself.

$\boxed{2}$ I cannot accept inconsistencies within myself.

34. (59-60)

$\boxed{1}$ I try to be sincere but I sometimes fail.

$\boxed{2}$ I try to be sincere and I am sincere.

35. (61-62)

$\boxed{1}$ Self-interest is natural.

$\boxed{2}$ Self-interest is unnatural.

36. (63-64)

$\boxed{1}$ People should always repent their wrong-doings.

$\boxed{2}$ People need not always repent their wrong-doings.

37. (65-66)

$\boxed{1}$ I am assertive and affirming.

$\boxed{2}$ I am not assertive and affirming.

38. (67-68)

$\boxed{1}$ It is a good idea to think about your greatest potential.

$\boxed{2}$ A person who thinks about his greatest potential gets conceited.

39. (69-70)

$\boxed{1}$ I am self-sufficient.

$\boxed{2}$ I am not self-sufficient.

40. (71-72)

$\boxed{1}$ I feel certain and secure in my relationships with others.

$\boxed{2}$ I feel uncertain and insecure in my relationships with others.

41. (73-74)

$\boxed{1}$ I can accept my mistakes.

$\boxed{2}$ I cannot accept my mistakes.

42. (75-76)

$\boxed{1}$ I can feel comfortable with less than a perfect performance.

$\boxed{2}$ I feel uncomfortable with anything less than a perfect performance.

43. (77-78)

$\boxed{1}$ I can overcome any obstacle as long as I believe in myself.

$\boxed{2}$ I cannot overcome every obstacle even if I believe in myself.

INSTRUCTIONS

FOR EACH OF THE FOLLOWING STATEMENTS, CIRCLE THE NUMBER BESIDE THE ANSWER THAT IS *MOST* TRUE OF YOU. TRY NOT TO USE THE MIDDLE ANSWERS UNLESS YOU FEEL YOU ABSOLUTELY MUST.

1. When someone speaks angrily to me, I can forget the matter quickly.

1 true 2 uncertain 3 false (09-10)

2. I am over-conscientious, worrying over my past acts or mistakes.

1 yes 2 in between 3 no (11-12)

3. I never feel so wretched that I want to cry.

1 true 2 uncertain 3 false (13-14)

4. If a person doesn't answer when I make a suggestion, I feel I've said something silly.

1 true 2 in between 3 false (15-16)

5. If an old friend seems cold and reserved to me, I usually:

1 just think "He's in a bad mood" 2 uncertain 3 worry about what I may have done wrong (17-18)

6. I get unreasonable fears of distastes for some things, for example, particular animals, places, and so on.

1 yes 2 sometimes 3 no (19-20)

PLEASE STOP HERE AND GIVE THIS
BOOKLET BACK TO THE INTERVIEWER.

THANKS VERY MUCH!!

APPENDIX III-E

STANDARDIZING EMPLOYMENT EARNINGS TO JUNE 1976 DOLLARS

STANDARDIZING EMPLOYMENT EARNINGS TO JUNE 1976 DOLLARS

In order to evaluate the impact of Mountain-Plains, data were collected at five time points -- pre-Center, and at nominal follow-up intervals of 6, 12, 18, and 24 months after leaving the program by Mountain-Plains (pre-Center and follow-up) and AAI (follow-up only). This data collection took place over a period of four years, during which time there was a marked increase in inflation. In order to correct for inflation, income variables were standardized to a base dollar value of June, 1976; i.e., income variables, regardless of the time of the follow-up interview, are expressed as the June, 1976 equivalent value. This standardization was done not only to correct for inflation, but also to make income data from different calendar times directly comparable.

The transformation factor was computed by means of the Hours and Earnings Index (H.E.I.) published by the Bureau of Labor Statistics in the Monthly Labor Review. The index for June, 1976 was divided by the index for the month when data were collected, creating a variable called "FACTOR" (for follow-up variables) and PFACTOR (for pre-Center variables). For example, the formula to standardize mean monthly family employment earnings for a follow-up interview conducted in January, 1975, would be:

1. FACTOR = (H.E.I. for June, 1976) / (H.E.I. for January, 1975)
2. $\overline{X}$ monthly family employment earnings in June, 1976 dollars = ($\overline{X}$ monthly family employment earnings in January, 1975 dollars x FACTOR.

Pre-Center annual economic variables were converted to a mean monthly value and then standardized by multiplying by PFACTOR. For example, the standardization of mean monthly male HOH employment earnings at pre-Center in June, 1976 dollars would be:

1. $\overline{X}$ monthly male HOH employment earnings at pre-Center = (male HOH employment earnings in year prior to pre-Center interview) / 12

2. $\overline{X}$ monthly male HOH employment earnings at pre-Center in June, 1976 dollars = ($\overline{X}$ monthly male HOH employment earnings at pre-Center) x PFACTOR.

Pre-Center economic variables were standardized for purposes of comparison across calendar time and for the computation of gain (change) scores.

APPENDIX III-F
COMPUTATION OF OUTCOMES

COMPUTATION OF OUTCOMES

This appendix provides the computational formulae for the six outcome measures utilized to assess the impact of Mountain-Plains on participants who completed the program. There are two outcome measures which represent the economic domain, two from the work domain, and one each for the family and personal domains. Frequency distributions on all six outcome measures are presented in Appendix 2I.

1.0 THE ECONOMIC DOMAIN

There were two variables chosen to represent the economic domain. The first was gain in mean monthly family employment earnings; the second was change in mean monthly welfare income.

1.1 Gains in Family Employment Earnings

The computational formula for mean monthly gain in employment earnings is as follows:

1. Standardize raw $\overline{X}$ monthly family employment earnings for both pre-Center and follow-up to June, 1976 dollars (see Appendix 2B for this formula).
2. Gain in $\overline{X}$ monthly employment earnings = $\overline{X}$ monthly family employment earnings at follow-up) - ($\overline{X}$ monthly family employment earnings at pre-Center).
3. Assign appropriate missing values* to the gain score if either pre-Center or follow-up values are missing for the standardized data.

---

*"Missing values" are coded values which automatically cause a case to be excluded from analyses involving the variable in question.

1.2 Change in Welfare Income

The algorithm for change in welfare income is very similar to that of gain in family employment earnings. Note that because this measure is also a post minus pre design, a positive value indicates an increase in welfare receipts.

1. Change in $\overline{X}$ monthly welfare income = ($\overline{X}$ monthly welfare income at follow-up) - ($\overline{X}$ monthly welfare receipts at pre-Center).
2. Assign appropriate missing values if either the follow-up or pre-Center value is missing.

2.0 THE WORK DOMAIN

Two variables were chosen to represent Mountain-Plains' impact on the work domain. First was a measure of gain in family weeks employed; the second was a measure of change in family occupational status.

2.1 Gain in Family Number of Weeks Employed in the Last Six Months

In order to compute gains in family weeks employed, gains in weeks employed were computed for male HOH's and spouses. The general computational formula for gain in weeks employed for male HOH's and spouses is as follows:

1. Weeks employed in last 6 months at $\left\{\begin{matrix}\text{pre-Center}\\ \text{follow-up}\end{matrix}\right\}$ = 26 -

   (weeks unemployed in 6 months prior to $\left\{\begin{matrix}\text{pre-Center}\\ \text{follow-up}\end{matrix}\right\}$ interview.
2. Gain in weeks employed = (Weeks employed in 6 months prior to follow-up interview) - (Weeks employed in 6 months prior to pre-Center interview).
3. Assign appropriate missing values if either the pre-Center weeks employed or follow-up weeks employed are missing.

The algorithm for gain in family weeks employed for one- and two-adult families is as follows:

1. Gain in family weeks employed for two-adult families = (Gain in male HOH weeks employed) + (Gain in spouse weeks employed) / 2

2. Gain in family weeks employed for one-adult families = Gain in HOH weeks employed.

3. Assign appropriate missing values to the gain score if either HOH or spouse data is missing.

2.2 Gain in Family Occupational Status

As was the case with gains in family weeks employed, gains in family occupational status were first computed separately for HOH and spouse. The algorithm is as follows:

1. Gain in occupational status for $\begin{matrix}\text{HOH}\\ \text{spouse}\end{matrix}$ = occupational status of current or most recent job at follow-up) - (occupational status of current or most recent job at pre-Center).

2. Assign missing values if either the pre-Center or follow-up variables are "missing" or if the follow-up variable is "not applicable."

Gains in family occupational status were computed in the following manner for one- and two-adult families:

1. Gains in family occupational status for two-adult families = (Gains in male HOH occupational status) + (Gains in spouse occupational status) / 2

2. Gains in family occupational status for one-adult families = Gains in female HOH occupational status.

3. Assign appropriate missing values if either male HOH or spouse variables are missing for two-adult families, or if the female HOH variable is missing for one-adult families.

2.3 Family Well-Being

The family well-being score represents a summarization of each family's responses to five measures within the family domain: family warmth and happiness, family strength, family sociability, respect for the individual, and child-centered vs. parent-centered. A summary score based on the first principal component was computed for one-adult and two-adult families: one-adult families incorporated scores for single female HOHs, while two-adult families included responses for both the male HOH and spouse.

2.4 Personal Well-Being

The summary score for personal well-being was a component score computed for one- and two-adult families; the measure for two-adult families incorporated responses for both male HOHs and spouse; one-adult families incorporated responses from single female HOHs. These were based on four raw measures in the personal domain: Self Acceptance, Self Regard, Self Confidence, and Personal Efficacy.

APPENDIX III-G

THE ANALYSIS STRATEGY: ANALYSIS OF COVARIANCE USING MULTIPLE REGRESSION MODELS

THE ANALYSIS STRATEGY: ANALYSIS OF COVARIANCE USING MULTIPLE REGRESSION MODELS

The discussions in the body of this report identified several important sources of variation in outcome measures. These include:

- National and regional economic conditions (the exogenous factors) such as inflation and unemployment rates;
- Those additional factors identified in the covariate set;
- Personal maturation processes;
- The "treatment" received at the Mountain-Plains program; and
- Interactions of this treatment with other factors named above.

It was necessary to incorporate all of these factors into the assessment of program impacts. The influence of inflation was taken into account by "standardizing" all earnings data to June 1976 dollars, using the "Hours and Earnings Index" developed by the Bureau of Labor Statistics.

The several factors in the covariate set provide data on pre-Center differences among individual subjects -- differences which may influence their levels on outcome measures -- along with local unemployment rates at the time of the follow-up interviews. From analyses conducted in connection with earlier reports, we know that participants and controls do not show significant, systematic differences on these characteristics. Nevertheless, incorporating these data into the analyses serves two important functions. First, they increase the precision of estimates of program impacts by reducing variance due to the factors they represent. Second, they give us useful information on what factors in our data predict levels on the various outcome measures.

Personal maturation was accounted for by making use of a variable which reflected the participants' "time out" -- the number of months since leaving the program (whether by completing all phases or by leaving prematurely) at follow-up. For controls, this exit time was estimated by adding eight months (the average length of time participants spent in the program) to the date of their pre-Center interview.

To allow for interactions of treatment with other variables and to ensure that the program impacts would not be "buried" and missed because they only existed for a subset of the sample, a set of treatment-by-covariate interaction terms were generated using each variable in the covariate set.

To assess the nature and strength of program impacts, a multiple regression/correlation (MRC) analysis format was utilized. This enabled us to compare program participants and controls in terms of their respective gains (from pre-Center to follow-up) or levels on outcomes not stated in terms of gains. In addition, we were able to statistically take into account all the covariates' effects on the outcomes, remove these sources of variation, and more accurately assess program impacts. Finally, the MRC approach greatly facilitates consideration of the many possible interaction effects which could conceal program impacts in the analysis.

More specifically, the analysis was an iterative process which took place in stages:

- Stage 1 -- Outcome measures were regressed on four sets of variables: first, the entire covariate set was entered into the analysis to remove the possible effects of age, occupational status at pre-Center, pre-Center income, etc. from the gains in earnings. Second, the length of time since program exit was entered to remove possible effects of personal maturation. Third, after these sources of variation were controlled for, the treatment indicator was entered to determine whether the program had had a statistically significant impact -- positive or negative -- on employment earnings.

  This produced a covaried regression (Cohen and Cohen, 1975) in which the regression coefficient for the treatment indicator tells the magnitude and direction of the mean difference between the treatment and control groups' gains in employment earnings, adjusted to account for all variables entered previously -- i.e., adjusted for the effects of the covariates and time out of the program. This provides a more precise estimate of program effects than an uncovaried regression.

Fourth, the interaction terms were permitted to enter via a stepwise selection procedure to determine whether the picture of program impacts on earnings gains derived might be distorted by the interaction of treatment with one or more covariates. If this procedure revealed evidence of strong interaction effects, the analysis moved to Stage 2.

- Stage 2 -- When there was evidence of an interaction effect (by criteria discussed below), the data cases were disaggregated (split at the overall median) on the variable interacting with the treatment, and Stage 1 was repeated for each resulting sub-group. If additional interaction effects were in evidence, the data cases showing the interaction were again disaggregated and reanalyzed.

  In this manner, we were able to draw relatively specific conclusions about types of families, e.g., one-adult families in which the female HOH reported one or more jobs during the year pre-Center and had less than 12 years of education -- on whom the program had various types of impacts. Thus, Stages 1 and 2 could be repeated several times as the close examination and specification of interaction effects proceeded. The results of Stages 1 and 2 appear as the covaried regression results in Chapter 4 of this report.

In assessing program impact and the existence of significant interaction effects, it was necessary to establish arbitrary statistical criteria. In the case of determining whether program impacts have occurred, the researcher must decide which is the more serious error to make: concluding that there is a program impact when in fact there is not, or concluding that there is no impact when in fact the program does make a difference. The choice between the two types of error is reflected in the level of statistical significance of the difference between the program participants and the control group which must be reached before the evaluator concludes that a program impact exists. Requiring a high level of statistical significance -- say, .05 -- means the researcher will only tolerate chances of 5 in 100 that the differences he finds are due to chance variations in sampling rather than to effects of the treatment (or program).

But the price paid for this high level of statistical certainty that a program effect exists is a substantially greater risk of wrongly concluding there is _no_ program impact, when, in fact, there _is_ an impact but there are too few data cases to show it convincingly.

In our analysis of data on the Mountain-Plains participants and controls, we have concluded that the risk of deciding that a truly effective program does not work -- i.e., the risk of missing real program impacts -- is more serious in its consequences than the other type of error. For this reason, we require that a level of statistical significance of only .20 (rather than the traditional .05 or .01) be obtained before we conclude that differences are due to program effects rather than to chance variations in our sample of data. This has the effect of making it somewhat easier for the data to show us that the Mountain-Plains program is having effects on gains in employment earnings than if we required a traditional level of .05. In other words, the test for treatment follow-up differences becomes more powerful, in that smaller differences (effects) are more likely to be detected.

In deciding whether there was evidence of an interaction effect, we wished to avoid unnecessarily complicating the analysis. Therefore, we were somewhat more stringent in our criteria and required a level of statistical significance of .05 before we went to Stage 2 of the analysis.

The two analytical stages described above were conducted separately for 2-adult families and for 1-adult families with a single female head of the household. Within these analytical categories, completers were compared with their respective control groups. In addition, the presence of significant interaction effects required us to further disaggregate the data in several instances and to repeat the analysis for each resulting subgroup. In a few instances, the resulting subgroups were too small to support the regression analysis. The rule of thumb we used was that when the number of variables to be entered into the regression was half the number of cases, there were too few cases for stable estimates of program impact, and the analysis of that subgroup's data was discontinued.

APPENDIX III-H
OTHER OUTCOME MEASURES

OTHER OUTCOME MEASURES

1.0 OVERVIEW

For the purposes of this report, six outcomes were chosen to represent four domains of quality of life. The six outcomes we have discussed represent what we feel are the most critical areas in which Mountain-Plains might have shown positive effects, given its own stated aims and objectives. However, a large number of other outcomes were examined in earlier, preliminary analyses by means of a variety of analytic techniques, including the covaried regression approach utilized in this report. The remaining outcomes, listed below, were originally analyzed for the purpose of explaining and specifying any apparent program impacts on the six critical outcomes and are cited only to provide the reader with a sense of the breadth of the evaluation. The results of analyzing these additional outcomes produced no clear or consistent picture of program impacts which would alter the conclusions drawn from the analyses we present in the body of this document.

2.0 THE ECONOMIC DOMAIN

The following is a list of other outcomes in the economic domain, which was divided into two components: adequacy of income, and financial management.

2.1 Adequacy of Income

Outcomes included under the rubric of "adequacy of income" are expressed as a mean monthly figure unless otherwise noted.

- gross family income
- gross family income per person
- family employment earnings per person
- family welfare receipts per person
- family discretionary income
- discretionary income per person

- family unemployment compensation
- family transfer payments
- transfer payments per person
- other income
- other income per person

2.2 Financial Management

The following outcomes were examined as indicators of the family's ability to manage its income:

- number of different places to which debts are owned
- percent of debts of which the family is behind in payment
- mean monthly cash outlay for debt amortization
- percent of families with loans from "reputable" lending institutions
- percent of families with loans from finance companies
- percent of families with savings acoounts
- gross $ in savings accounts
- gross deposits into savings accounts over last six months
- gross deposits into savings per person over last six months

3.0 WORK DOMAIN OUTCOMES

There were several areas of interest in the work domain. We have reported on two: change in weeks employed and change in family occupational status. Other measures which we examined were calculated and analyzed separately for men (male HOH's) and women (spouses and single female HOH's).

3.1 Employment Earnings

- mean monthly earnings over last six months
- mean monthly earnings while working

3.2 Career Progression

- change in hourly wage rate from start to end of the current job, or the first job in the last six months (hereafter JOB1)
- change in Composite Index (Supervision/autonomy/responsibilities) from start to current/end of JOB1

3.3 Labor Force Participation

- percent of families in the labor force at the time of follow-up interview

3.4 Unemployment

- number of weeks unemployed during the last six months for all respondents
- number of weeks unemployed during last six months only for those respondents in the labor force
- unemployment rate of experimentals and controls

3.5 Underemployment

- percent employed over past six months

3.6 Job-Holding Ability

- number of jobs in last six months
- average duration of JOB1 as a percent of time since exit from the program
- reasons for leaving JOB1 (for those unemployed at time of interview)

3.7 Job-Finding/Job Search Actions

- activities for JOB1 for persons employed at the time of interview
- activities for job search for those not employed at the time of the interview

3.8 Job Satisfaction (JDI Scales; based only on "current or most recent job" at time of follow-up):

Satisfaction with...

- work tasks
- coworkers
- pay scales
- promotion
- supervison

4.0 FAMILY DOMAIN OUTCOMES

Raw family domain outcomes were computed for men (male HOH's) and women (spouses/single female HOH's). The five outcomes were as follows:

- family warmth and happiness
- family strength (cohesiveness)
- family sociability
- respect for the individual
- child-centered vs. parent-centered

5.0 PERSONAL DOMAIN OUTCOMES

There were four raw outcomes in the personal domain which were used to compute the family summary score. The four raw scales were as follows:

- self acceptance scales
- self regard scales
- self confidence scales
- personal efficacy scales

APPENDIX III-I

FREQUENCY DISTRIBUTIONS ON OUTCOME MEASURES

Table III-I1

Frequency Distribution: Gain in Mean Monthly Family Employment (in June 1976 dollars) from Pre-Center to Follow-Up for All Completer Participants and Control Families

		ADJ	CUM			ADJ	CUM			ADJ	CUM
COVE	FREQ	PCT	PCT	CODE	FREQ	PCT	PCT	CODE	FREQ	PCT	PCT
-742.	1	0	0	-260.	1	0	7	-130.	1	0	15
-631.	1	0	0	-257.	1	0	7	-129.	2	0	15
-614.	1	0	0	-253.	1	0	7	-128.	1	0	15
-593.	1	0	0	-252.	1	0	7	-127.	1	0	15
-578.	1	0	1	-251.	1	0	7	-126.	1	0	15
-571.	1	0	1	-246.	1	0	7	-123.	1	0	15
-506.	1	0	1	-243.	1	0	7	-122.	1	0	15
-500.	1	0	1	-242.	1	0	8	-120.	2	0	16
-499.	1	0	1	-241.	1	0	8	-115.	1	0	16
-483.	1	0	1	-240.	1	0	8	-109.	3	0	16
-473.	1	0	1	-237.	1	0	8	-107.	2	0	16
-467.	1	0	1	-236.	1	0	8	-106.	2	0	17
-461.	1	0	2	-235.	2	0	8	-105.	1	0	17
-456.	1	0	2	-232.	1	0	8	-104.	1	0	17
-455.	1	0	2	-230.	1	0	9	-97.	1	0	17
-450.	1	0	2	-229.	1	0	9	-95.	1	0	17
-444.	1	0	2	-223.	1	0	9	-92.	1	0	17
-419.	1	0	2	-214.	1	0	9	-91.	2	0	17
-416.	1	0	2	-213.	1	0	9	-90.	2	0	18
-406.	2	0	2	-212.	1	0	9	-89.	1	0	18
-388.	1	0	3	-208.	2	0	9	-88.	2	0	18
-384.	1	0	3	-207.	1	0	9	-87.	1	0	18
-382.	2	0	3	-206.	2	0	10	-86.	1	0	18
-379.	2	0	3	-201.	1	0	10	-85.	1	0	18
-371.	1	0	3	-200.	1	0	10	-81.	1	0	18
-360.	1	0	3	-197.	1	0	10	-79.	2	0	19
-346.	1	0	4	-186.	1	0	10	-75.	1	0	19
-345.	1	0	4	-182.	2	0	10	-74.	1	0	19
-344.	1	0	4	-180.	1	0	11	-73.	3	0	19
-339.	1	0	4	-178.	1	0	11	-67.	1	0	19
-330.	1	0	4	-176.	1	0	11	-66.	1	0	20
-329.	1	0	4	-173.	1	0	11	-65.	1	0	20
-323.	1	0	4	-171.	2	0	11	-64.	1	0	20
-319.	2	0	4	-170.	1	0	11	-62.	1	0	20
-314.	1	0	5	-161.	1	0	11	-61.	1	0	20
-310.	1	0	5	-160.	1	0	11	-60.	1	0	20
-309.	1	0	5	-159.	1	0	12	-58.	4	0	21
-302.	1	0	5	-156.	1	0	12	-56.	1	0	21
-296.	1	0	5	-155.	2	0	12	-55.	1	0	21
-289.	1	0	5	-152.	1	0	12	-53.	1	0	21
-286.	1	0	5	-151.	2	0	12	-52.	2	0	21
-284.	1	0	5	-149.	2	0	13	-51.	2	0	21
-277.	1	0	6	-147.	2	0	13	-49.	1	0	22
-276.	1	0	6	-145.	3	0	13	-47.	1	0	22
-274.	1	0	6	-144.	2	0	13	-45.	1	0	22
-273.	1	0	6	-139.	2	0	14	-41.	3	0	22
-270.	2	0	6	-136.	1	0	14	-40.	1	0	22
-269.	1	0	6	-135.	3	0	14	-39.	1	0	22
-267.	2	0	7	-133.	2	0	14	-38.	1	0	22
-261.	1	0	7	-131.	1	0	14	-37.	1	0	23

Table III-I1

```
                ADJ CUM                    ADJ CUM                    ADJ CUM
CODE     FREQ   PCT PCT    CODE     FREQ   PCT PCT    CODE     FREQ   PCT PCT

 -36.       1     0  23     46.        1     0  36    118.        2     0  46
 -34.       1     0  23     48.        1     0  36    120.        2     0  46
 -33.       1     0  23     51.        2     0  36    122.        1     0  46
 -32.       2     0  23     52.        1     0  37    123.        1     0  46
 -29.       2     0  23     54.        1     0  37    125.        1     0  46
 -28.       1     0  24     55.        4     0  37    127.        1     0  46
 -27.       3     0  24     56.        1     0  37    128.        4     0  47
 -26.       1     0  24     57.        5     1  38    132.        2     0  47
 -24.       3     0  24     58.        2     0  38    134.        1     0  47
 -22.       2     0  25     60.        2     0  38    135.        1     0  47
 -21.       3     0  25     62.        1     0  38    138.        1     0  47
 -18.       2     0  25     64.        2     0  39    139.        1     0  47
 -17.       2     0  25     65.        3     0  39    140.        2     0  48
 -16.       3     0  26     68.        1     0  39    141.        1     0  48
 -15.       3     0  26     69.        1     0  39    142.        2     0  48
 -14.       2     0  26     70.        2     0  39    143.        3     0  48
 -11.       2     0  27     71.        1     0  40    144.        1     0  48
 -10.       1     0  27     73.        1     0  40    146.        4     0  49
  -8.       1     0  27     74.        2     0  40    148.        1     0  49
  -7.       2     0  27     76.        1     0  40    149.        1     0  49
  -5.       2     0  27     77.        1     0  40    150.        1     0  49
  -3.       2     0  28     79.        1     0  40    151.        1     0  49
  -1.       1     0  28     80.        1     0  40    152.        2     0  50
   0       18     2  30     83.        1     0  41    153.        1     0  50
   1.       1     0  30     84.        2     0  41    154.        1     0  50
   4.       1     0  30     85.        1     0  41    155.        2     0  50
   6.       2     0  30     87.        1     0  41    156.        1     0  50
   8.       1     0  30     88.        1     0  41    158.        1     0  50
  10.       2     0  31     90.        1     0  41    160.        1     0  50
  13.       2     0  31     91.        1     0  41    161.        1     0  51
  14.       2     0  31     92.        2     0  42    162.        1     0  51
  15.       2     0  31     93.        1     0  42    163.        1     0  51
  18.       1     0  31     95.        1     0  42    164.        2     0  51
  19.       4     0  32     96.        1     0  42    165.        2     0  51
  20.       3     0  32     98.        2     0  42    166.        2     0  52
  21.       5     1  33     99.        2     0  42    167.        2     0  52
  22.       1     0  33    100.        3     0  43    168.        2     0  52
  26.       5     1  34    101.        1     0  43    172.        1     0  52
  27.       1     0  34    103.        2     0  43    173.        1     0  52
  29.       5     1  34    105.        2     0  43    175.        1     0  52
  30.       1     0  34    106.        1     0  43    176.        2     0  53
  32.       2     0  35    107.        1     0  44    177.        1     0  53
  33.       2     0  35    108.        1     0  44    178.        1     0  53
  35.       2     0  35    109.        1     0  44    179.        1     0  53
  36.       1     0  35    112.        1     0  44    180.        1     0  53
  37.       1     0  35    113.        4     0  44    181.        1     0  53
  39.       2     0  36    114.        2     0  45    182.        2     0  53
  40.       1     0  36    115.        1     0  45    183.        3     0  54
  42.       1     0  36    116.        3     0  45    184.        1     0  54
  45.       1     0  36    117.        1     0  45    187.        2     0  54
```

Table III-11

CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT
188.	1	0	54	276.	1	0	62	361.	2	0	73
189.	1	0	54	277.	2	0	63	362.	1	0	73
191.	1	0	54	278.	1	0	63	363.	2	0	73
194.	1	0	55	280.	1	0	63	364.	2	0	73
195.	1	0	55	282.	1	0	63	365.	1	0	73
196.	1	0	55	283.	2	0	63	370.	1	0	73
199.	2	0	55	288.	1	0	63	371.	3	0	74
201.	1	0	55	291.	3	0	64	376.	1	0	74
202.	1	0	55	292.	1	0	64	377.	1	0	74
203.	1	0	55	293.	1	0	64	379.	1	0	74
204.	1	0	56	294.	3	0	64	381.	1	0	74
205.	2	0	56	295.	1	0	64	388.	1	0	74
206.	3	0	56	296.	1	0	65	389.	2	0	75
207.	3	0	57	299.	1	0	65	392.	1	0	75
209.	1	0	57	300.	1	0	65	394.	1	0	75
210.	1	0	57	301.	1	0	65	397.	2	0	75
212.	1	0	57	306.	4	0	65	398.	4	0	76
213.	1	0	57	307.	2	0	66	399.	1	0	76
215.	1	0	57	308.	2	0	66	400.	2	0	76
216.	2	0	57	309.	2	0	66	401.	1	0	76
217.	1	0	57	311.	2	0	66	402.	1	0	76
218.	1	0	58	312.	3	0	67	404.	2	0	76
219.	1	0	58	313.	2	0	67	405.	1	0	76
221.	2	0	58	314.	2	0	67	408.	1	0	77
222.	1	0	58	315.	1	0	67	411.	1	0	77
223.	3	0	58	316.	1	0	67	413.	1	0	77
225.	1	0	59	317.	1	0	67	414.	1	0	77
227.	1	0	59	318.	2	0	68	419.	2	0	77
230.	1	0	59	319.	1	0	68	421.	2	0	77
232.	1	0	59	320.	1	0	68	422.	1	0	78
233.	1	0	59	321.	2	0	68	423.	2	0	78
234.	1	0	59	322.	2	0	68	424.	1	0	78
236.	1	0	59	324.	2	0	69	426.	2	0	78
238.	1	0	59	327.	2	0	69	427.	1	0	78
239.	1	0	59	330.	3	0	69	428.	4	0	79
243.	1	0	60	331.	2	0	70	432.	1	0	79
247.	1	0	60	332.	1	0	70	433.	1	0	79
249.	4	0	60	333.	1	0	70	434.	1	0	79
250.	1	0	60	335.	3	0	70	435.	1	0	79
252.	1	0	60	336.	1	0	70	[illegible]	1	0	79
254.	1	0	61	337.	1	0	70	439.	1	0	79
255.	1	0	61	343.	2	0	71	442.	1	0	80
259.	1	0	61	345.	1	0	71	444.	1	0	80
260.	2	0	61	346.	2	0	71	445.	1	0	80
261.	1	0	61	350.	1	0	71	447.	1	0	80
262.	1	0	61	351.	1	0	71	450.	2	0	80
263.	3	0	62	353.	1	0	71	451.	1	0	80
268.	1	0	62	356.	3	0	72	454.	1	0	80
271.	3	0	62	357.	4	0	72	456.	1	0	80
272.	2	0	62	359.	2	0	72	457.	1	0	81

Table III-I1

CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT
463.	1	0	81	567.	1	0	88	738.	1	0	95
465.	1	0	81	568.	1	0	88	740.	1	0	95
469.	1	0	81	571.	2	0	89	746.	1	0	95
470.	1	0	81	575.	1	0	89	761.	1	0	95
473.	1	0	81	582.	2	0	89	762.	1	0	95
475.	2	0	81	583.	2	0	89	769.	1	0	95
476.	1	0	82	586.	1	0	89	781.	1	0	95
479.	2	0	82	587.	1	0	89	787.	1	0	96
480.	2	0	82	590.	1	0	90	790.	1	0	96
481.	2	0	82	591.	1	0	90	791.	1	0	96
484.	2	0	83	593.	1	0	90	801.	2	0	96
492.	3	0	83	599.	1	0	90	809.	1	0	96
494.	1	0	83	600.	1	0	90	818.	1	0	96
496.	1	0	83	604.	2	0	90	825.	1	0	96
497.	1	0	83	607.	1	0	90	837.	1	0	96
504.	1	0	83	612.	1	0	91	856.	1	0	97
506.	1	0	83	614.	1	0	91	857.	1	0	97
509.	1	0	84	615.	1	0	91	871.	1	0	97
512.	2	0	84	616.	1	0	91	874.	1	0	97
513.	1	0	84	626.	3	0	91	882.	1	0	97
514.	2	0	84	633.	1	0	91	885.	1	0	97
515.	1	0	84	635.	1	0	91	896.	1	0	97
517.	1	0	84	640.	1	0	92	923.	1	0	97
519.	1	0	85	641.	1	0	92	932.	1	0	98
522.	1	0	85	643.	2	0	92	962.	1	0	98
523.	2	0	85	646.	1	0	92	992.	1	0	98
524.	2	0	65	655.	2	0	92	1019.	1	0	98
527.	1	0	85	657.	1	0	92	1038.	1	0	98
528.	1	0	85	658.	1	0	93	1048.	1	0	98
532.	1	0	85	659.	1	0	93	1059.	1	0	98
533.	1	0	86	662.	1	0	93	1102.	1	0	98
534.	1	0	86	663.	1	0	93	1108.	1	0	98
537.	2	0	86	666.	1	0	93	1110.	1	0	99
540.	1	0	86	674.	1	0	93	1132.	1	0	99
541.	1	0	86	689.	1	0	93	1144.	1	0	99
545.	2	0	86	690.	1	0	93	1187.	1	0	99
546.	2	0	87	698.	1	0	93	1221.	1	0	99
547.	1	0	87	707.	1	0	94	1230.	1	0	99
548.	1	0	87	709.	1	0	94	1284.	1	0	99
550.	2	0	87	711.	1	0	94	1302.	1	0	99
551.	2	0	87	714.	1	0	94	1399.	1	0	100
553.	1	0	87	720.	1	0	94	1512.	1	0	100
558.	2	0	88	728.	1	0	94	1548.	1	0	100
560.	2	0	88	731.	1	0	94	1673.	1	0	100
564.	1	0	88	735.	1	0	94	1929.	1	0	100
565.	1	0	88	736.	1	0	95				

Table III-11

```
                          M I S S I N G   D A T A
    CODE    FREQ               CODE   FREQ              CODE    FREQ

  -99999.     28

 MEAN          194.279     STD ERR       11.595      MEDIAN        155.000
 MODE                0     STD DEV      337.249      VARIANCE 113737.200
 KURTOSIS        1.782     SKEWNESS        .742      RANGE        2671.000
 MINIMUM      -742.000     MAXIMUM     1929.000      SUM        164360.000
 C.V. PCT      173.590     .95 C.I.     171.521             TO     217.037

 VALID CASES       846     MISSING CASES     28
```

Table III-I2

Frequency Distribution: Change in Mean Monthly Welfare Income (in June 1976 dollars) from Pre-Center to Follow-Up for All Completer Participants and Control Families

CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT	CODE	FREQ	ADJ PCT	CUM PCT
-335.	1	0	0	-42.	1	0	10	24.	4	0	77
-254.	2	0	0	-40.	2	0	10	25.	2	0	77
-247.	1	0	0	-37.	1	0	10	26.	1	0	77
-239.	3	0	1	-36.	2	0	11	27.	3	0	77
-229.	1	0	1	-35.	1	0	11	28.	2	0	78
-228.	1	0	1	-30.	1	0	11	29.	1	0	78
-220.	1	0	1	-28.	2	0	11	30.	3	0	78
-211.	1	0	1	-26.	1	0	11	32.	1	0	78
-208.	1	0	1	-25.	1	0	11	33.	2	0	78
-200.	1	0	1	-23.	3	0	12	36.	2	0	79
-193.	1	0	2	-20.	1	0	12	37.	3	0	79
-191.	1	0	2	-19.	1	0	12	38.	1	0	79
-190.	2	0	2	-18.	3	0	12	39.	1	0	79
-188.	3	0	2	-17.	3	0	13	40.	2	0	79
-182.	4	0	3	-15.	9	1	14	42.	3	0	80
-175.	1	0	3	-14.	1	0	14	43.	3	0	80
-171.	1	0	3	-13.	3	0	14	45.	1	0	80
-158.	2	0	3	-12.	8	1	15	46.	3	0	81
-150.	3	0	4	-11.	2	0	15	47.	2	0	81
-144.	2	0	4	-10.	4	0	16	48.	1	0	81
-134.	2	0	4	-9.	2	0	16	51.	1	0	81
-132.	1	0	4	-8.	1	0	16	52.	2	0	81
-129.	1	0	4	-7.	5	1	17	53.	4	0	82
-117.	1	0	4	-6.	5	1	17	54.	1	0	82
-115.	1	0	4	-5.	1	0	17	57.	4	0	82
-103.	2	0	5	-4.	3	0	18	58.	2	0	82
-102.	4	0	5	-3.	3	0	18	60.	3	0	83
-101.	1	0	5	-2.	2	0	18	61.	2	0	83
-93.	1	0	5	-1.	1	0	18	62.	2	0	83
-90.	1	0	5	0	462	53	71	63.	1	0	83
-88.	1	0	6	1.	2	0	71	64.	1	0	84
-87.	1	0	6	3.	1	0	72	65.	3	0	84
-85.	1	0	6	4.	4	0	72	66.	1	0	84
-83.	1	0	6	5.	2	0	72	67.	2	0	84
-80.	1	0	6	6.	1	0	72	71.	1	0	84
-79.	2	0	6	7.	1	0	72	72.	3	0	85
-75.	1	0	6	8.	5	1	73	74.	1	0	85
-74.	1	0	7	9.	2	0	73	75.	3	0	85
-71.	3	0	7	10.	1	0	73	76.	2	0	85
-68.	4	0	7	12.	1	0	73	78.	2	0	86
-67.	1	0	7	13.	1	0	74	79.	1	0	86
-64.	2	0	8	15.	4	0	74	81.	2	0	86
-61.	1	0	8	16.	1	0	74	84.	1	0	86
-58.	2	0	8	17.	4	0	75	86.	2	0	86
-55.	7	1	9	18.	3	0	75	90.	3	0	87
-54.	1	0	9	19.	2	0	75	91.	2	0	87
-47.	1	0	9	20.	1	0	75	92.	2	0	87
-46.	4	0	9	21.	3	0	76	95.	1	0	87
-45.	2	0	10	22.	2	0	76	96.	1	0	87
-44.	2	0	10	23.	3	0	76	97.	1	0	87

Table III-I2

```
                  ADJ CUM                       ADJ CUM                        ADJ CUM
CODE        FREQ  PCT PCT     CODE        FREQ  PCT PCT     CODE         FREQ  PCT PCT

 103.          1    0  88      144.          1    0  92      250.           2    0  97
 105.          1    0  88      146.          2    0  92      251.           2    0  97
 106.          3    0  88      147.          1    0  92      254.           1    0  97
 107.          1    0  88      148.          1    0  92      259.           2    0  97
 108.          1    0  88      149.          1    0  92      261.           1    0  97
 109.          1    0  88      150.          3    0  93      268.           1    0  97
 110.          2    0  89      153.          1    0  93      270.           1    0  97
 111.          1    0  89      154.          2    0  93      271.           1    0  98
 112.          1    0  89      156.          1    0  93      275.           2    0  98
 113.          1    0  89      157.          4    0  94      278.           1    0  98
 114.          2    0  89      174.          1    0  94      281.           1    0  98
 116.          1    0  89      178.          2    0  94      282.           1    0  98
 117.          2    0  89      188.          1    0  94      283.           1    0  98
 118.          1    0  90      189.          1    0  94      284.           1    0  98
 119.          1    0  90      190.          1    0  94      304.           1    0  99
 120.          2    0  90      191.          1    0  95      306.           1    0  99
 121.          1    0  90      192.          5    1  95      308.           2    0  99
 123.          2    0  90      193.          1    0  95      323.           1    0  99
 124.          2    0  91      197.          2    0  95      329.           1    0  99
 125.          1    0  91      200.          1    0  96      333.           1    0  99
 126.          1    0  91      201.          1    0  96      350.           1    0  99
 129.          1    0  91      220.          1    0  96      360.           1    0  99
 131.          1    0  91      223.          1    0  96      373.           1    0 100
 134.          2    0  91      233.          1    0  96      381.           1    0 100
 138.          1    0  91      244.          1    0  96      407.           1    0 100
 139.          2    0  92      245.          1    0  96      408.           1    0 100
 143.          2    0  92      249.          1    0  96      438.           1    0 100

MEAN             18.098      STD ERR            2.971      MEDIAN                .100
MODE                  0      STD DEV           87.828      VARIANCE          7713.711
KURTOSIS          4.667      SKEWNESS           1.070      RANGE              773.000
MINIMUM        -335.000      MAXIMUM          438.000      SUM              15818.000
C.V. PCT        485.279      ±95 C.I.          12.268                TO        23.929

VALID CASES         874      MISSING CASES          0
```

Table III-13

Frequency Distribution: Gain in Number of Weeks Employed in Past 6 Months from Pre-Center to Follow-Up for All Completer Participants and Control Families

```
                  ADJ CUM                       ADJ CUM                       ADJ CUM
CODE        FREQ  PCT PCT     CODE        FREQ  PCT PCT     CODE        FREQ  PCT PCT

 -25.          1    0   0      -4.          14    2  13      12.          16    2  72
 -22.          1    0   0      -3.          11    2  14      13.          37    6  77
 -21.          2    0   1      -2.          18    3  17      14.          23    4  81
 -18.          2    0   1      -1.          22    3  21      15.          19    3  84
 -17.          3    0   1       0           40    6  27      16.          23    4  87
 -15.          1    0   2       1.          30    5  31      17.          12    2  89
 -14.          1    0   2       2.          45    7  38      18.          10    2  91
 -13.          3    0   2       3.          26    4  42      19.           5    1  91
 -12.          3    0   3       4.          25    4  46      20.           4    1  92
 -11.          6    1   4       5.          22    3  49      21.          11    2  94
 -10.          5    1   4       6.          22    3  53      22.           6    1  95
  -9.          3    0   5       7.          22    3  56      23.           1    0  95
  -8.          8    1   6       8.          26    4  60      24.           4    1  95
  -7.         15    2   8       9.          20    3  63      25.           6    1  96
  -6.          3    0   9      10.          26    4  67      26.          24    4 100
  -5.         13    2  11      11.          17    3  69

                         M I S S I N G   D A T A
CODE        FREQ              CODE     FREQ                 CODE     FREQ

-99999.      183           -99998.       34

MEAN           6.347       STD ERR          .364       MEDIAN            5.750
MODE           2.000       STD DEV         9.327       VARIANCE         87.001
KURTOSIS       -.001       SKEWNESS        -.028       RANGE            51.000
MINIMUM      -25.000       MAXIMUM        26.000       SUM            4170.000
C.V. PCT     146.958       .95 C.I.        5.632               TO        7.062

VALID CASES      657       MISSING CASES     217
```

Table III-I4

Frequency Distribution:
Gain in Occupational Status of Current or Most Recent Job from Pre-Center to Follow-Up for Two-Adult Completer Families and Controls

```
                  ADJ  CUM                       ADJ  CUM                       ADJ  CUM
CODE        FREQ  PCT  PCT     CODE       FREQ  PCT  PCT     CODE       FREQ  PCT  PCT

-41.           1    0    0       1.          5    1   30      31.          2    0   80
-33.           1    0    0       2.          6    1   32      32.          6    1   81
-30.           1    0    1       3.         14    3   35      33.          5    1   82
-29.           1    0    1       4.          6    1   37      34.          5    1   83
-28.           1    0    1       5.         10    2   39      35.          5    1   85
-27.           1    0    1       6.         11    3   41      36.          4    1   86
-26.           1    0    2       7.          8    2   43      37.          4    1   87
-25.           7    2    3       8.          4    1   44      38.          7    2   88
-22.           1    0    3       9.         11    3   47      39.          7    2   90
-20.           3    1    4      10.          7    2   48      40.          2    0   90
-19.           5    1    5      11.          9    2   50      41.          6    1   92
-18.           1    0    6      12.          2    0   51      42.          1    0   92
-17.           3    1    6      13.          7    2   53      43.          3    1   93
-16.           3    1    7      14.          9    2   55      44.          4    1   93
-15.           4    1    8      15.         12    3   57      45.          1    0   94
-14.           5    1    9      16.          7    2   59      46.          2    0   94
-13.           4    1   10      17.         10    2   61      47.          1    0   94
-12.           7    2   12      18.          7    2   63      48.          2    0   95
-11.           1    0   12      19.          4    1   64      49.          1    0   95
-10.           2    0   12      20.         10    2   66      50.          1    0   95
 -9.           7    2   14      21.          6    1   68      51.          2    0   96
 -8.           8    2   16      22.          7    2   69      52.          2    0   96
 -7.           8    2   18      23.          4    1   70      53.          3    1   97
 -6.           4    1   19      24.          1    0   70      56.          3    1   98
 -5.           6    1   20      25.          5    1   72      60.          1    0   98
 -4.           7    2   22      26.          8    2   73      61.          3    1   99
 -3.           6    1   23      27.          3    1   74      63.          1    0   99
 -2.           8    2   25      28.          9    2   76      65.          2    0   99
 -1.           6    1   26      29.          6    1   78      66.          1    0  100
  0           13    3   29      30.          7    2   79      70.          2    0  100

                                 M I S S I N G   D A T A
  CODE      FREQ                  CODE     FREQ                 CODE     FREQ

-99999.      170               -99998.      274

MEAN          13.123         STD ERR            .992         MEDIAN            11.278
MODE           3.000         STD DEV          20.578         VARIANCE         423.437
KURTOSIS       -.259         SKEWNESS           .270         RANGE            111.000
MINIMUM      -41.000         MAXIMUM          70.000         SUM             5643.000
C.V. PCT     156.802         .95 C.I.         11.173                   TO      15.074

VALID CASES      430         MISSING CASES      444
```

Table III-I5

Frequency Distribution: Gain in Occupational Status of Current or Most Recent Job from Pre-Center to Follow-Up for One-Adult Completer Families and Controls

```
                 ADJ  CUM                      ADJ  CUM                      ADJ  CUM
   CODE    FREQ  PCT  PCT     CODE      FREQ  PCT  PCT     CODE      FREQ  PCT  PCT

   -47.       1    1    1       4.         1    1   34      36.         3    2   70
   -44.       2    2    2       6.         1    1   35      38.         2    2   72
   -42.       1    1    3       8.         2    2   36      40.         4    3   75
   -36.       1    1    4       9.         2    2   38      41.         4    3   79
   -32.       2    2    6      10.         4    3   41      43.         3    2   81
   -31.       1    1    7      11.         1    1   42      46.         1    1   82
   -23.       1    1    7      14.         3    2   45      47.         1    1   83
   -17.       1    1    8      15.         1    1   45      49.         1    1   83
   -16.       1    1    9      16.         2    2   47      50.         2    2   85
   -15.       2    2   11      17.         1    1   48      51.         3    2   88
   -14.       1    1   12      18.         1    1   49      55.         1    1   88
    -7.       3    2   14      19.         5    4   53      57.         1    1   89
    -6.       1    1   15      20.         1    1   54      60.         2    2   91
    -5.       2    2   17      24.         2    2   55      63.         3    2   93
    -4.       3    2   19      29.         1    1   56      64.         1    1   94
    -1.       2    2   21      31.         4    3   60      66.         5    4   98
     0        3    2   23      32.         4    3   63      80.         1    1   99
     1.      11    9   32      33.         3    2   65      83.         1    1  100
     3.       1    1   33      34.         3    2   68

                           M I S S I N G   D A T A
   CODE    FREQ               CODE      FREQ                  CODE      FREQ

 -99999.    696             -99998.      57

MEAN            20.074     STD ERR          2.579     MEDIAN          18.800
MODE             1.000     STD DEV         28.374     VARIANCE       805.069
KURTOSIS         -.404     SKEWNESS         -.149     RANGE          130.000
MINIMUM        -47.000     MAXIMUM         84.000     SUM           2429.000
C.V. PCT       141.343     .95 C.I.        14.967            TO       25.181

VALID CASES        121     MISSING CASES     753
```

Table III-I6

Frequency Distribution: Family Well-Being Scores for Two-Adult Completer Families and Controls

```
                                               RELATIVE   ADJUSTED      CUM
                                   ABSOLUTE      FREQ       FREQ       FREQ
CATEGORY LABEL             CODE      FREQ       (PCT)      (PCT)      (PCT)

                            -3.         3          .5        1.0        1.0

                            -2.        18         3.2        5.9        6.9

                            -1.        61        10.9       20.0       26.9

                              0       110        19.6       36.1       63.0

                             1.       105        18.8       34.4       97.4

                             2.         8         1.4        2.6      100.0

                        -99999.        90        16.1    MISSING      100.0

                        -99998.       165        29.5    MISSING      100.0
                                   -------    -------    -------
                          TOTAL       560       100.0      100.0

MEAN              .069    STD ERR          .057    MEDIAN           .141
MODE                 0    STD DEV          .987    VARIANCE         .975
KURTOSIS         -.038    SKEWNESS        -.551    RANGE           5.000
MINIMUM         -3.000    MAXIMUM         2.000    SUM            15.000
C.V. PCT      2007.289    .95 C.I.        -.062            TO       .160

VALID CASES        305    MISSING CASES     255
```

Table III-I7

Frequency Distribution: Family Well-Being Scores for One-Adult Completer Families and Controls

```
                                                 RELATIVE   ADJUSTED     CUM
                                      ABSOLUTE     FREQ       FREQ       FREQ
CATEGORY LABEL                 CODE     FREQ      (PCT)      (PCT)      (PCT)

                                -3.         4         .7        3.1        3.1

                                -2.        10        1.8        7.6       10.7

                                -1.        22        3.9       16.8       27.5

                                 0         50        8.9       38.2       65.6

                                 1.        38        6.8       29.0       94.7

                                 2.         7        1.2        5.3      100.0

                            -99999.         7        1.2    MISSING      100.0

                            -99998.       422       75.4    MISSING      100.0
                                       -------    -------    -------
                              TOTAL       560      100.0      100.0

MEAN            -.015     STD ERR          .098      MEDIAN           .090
MODE                0     STD DEV         1.123      VARIANCE        1.261
KURTOSIS         .163     SKEWNESS        -.591      RANGE           5.000
MINIMUM        -3.000     MAXIMUM         2.000      SUM            -2.000
C.V. PCT    -7356.159     .95 C.I.        -.209             TO        .179

VALID CASES       131     MISSING CASES     429
```

Table III-18

Frequency Distribution: Personal Well-Being Scores for Two-Adult Completer Families and Controls

```
                                               RELATIVE   ADJUSTED     CUM
                                    ABSOLUTE     FREQ       FREQ       FREQ
CATEGORY LABEL               CODE     FREQ      (PCT)      (PCT)      (PCT)

                              -6.        1         .2         .3         .3

                              -5.        1         .2         .3         .6

                              -4.        3         .5         .8        1.4

                              -3.       17        3.0        4.8        6.2

                              -2.       13        2.3        3.7        9.9

                              -1.       64       11.4       18.0       27.9

                               0        92       16.4       25.9       53.8

                               1.       79       14.1       22.3       76.1

                               2.       64       11.4       18.0       94.1

                               3.       18        3.2        5.1       99.2

                               4.        3         .5         .8      100.0

                          -99999.       67       12.0    MISSING      100.0

                          -99998.      136       24.6    MISSING      100.0
                                    ------     ------     ------
                            TOTAL      560      100.0      100.0

MEAN            .307     STD ERR          .084       MEDIAN          .353
MODE               0     STD DEV         1.585       VARIANCE       2.513
KURTOSIS        .610     SKEWNESS        -.512       RANGE         10.000
MINIMUM       -6.000     MAXIMUM         4.000       SUM          109.000
C.V. PCT     516.275     .95 C.I.         .142           TO          .473

VALID CASES      355     MISSING CASES     205
```

Table III-19

Frequency Distribution: Personal Well-Being Scores for One-Adult Completer Families and Controls

```
                                             RELATIVE  ADJUSTED    CUM
                                  ABSOLUTE     FREQ      FREQ      FREQ
CATEGORY LABEL            CODE      FREQ      (PCT)     (PCT)     (PCT)

                           -2.        14        2.5      10.3      10.3

                           -1.        23        4.1      16.9      27.2

                             0        50        8.9      36.8      64.0

                            1.        37        6.6      27.2      91.2

                            2.        12        2.1       8.8     100.0

                       -99999.         2         .4   MISSING     100.0

                       -99998.       422       75.4   MISSING     100.0
                                  ------     ------    ------
                         TOTAL       560      100.0     100.0

MEAN             .074    STD ERR          .094    MEDIAN            .120
MODE                0    STD DEV         1.100    VARIANCE         1.209
KURTOSIS        -.541    SKEWNESS        -.213    RANGE            4.000
MINIMUM        -2.000    MAXIMUM         2.000    SUM             10.000
C.V. PCT     1445.609    .95 C.I.        -.113          TO          .260

VALID CASES       136    MISSING CASES    424
```

APPENDIX III-J

COVARIED REGRESSION COEFFICIENTS, 95% CONFIDENCE INTERVALS, AND REGRESSION SUMMARY TABLES FROM ANALYSES OF OUTCOME MEASURES

COVARIED REGRESSION COEFFICIENTS,
95% CONFIDENCE INTERVALS, AND REGRESSION SUMMARY TABLES
FROM ANALYSES OF OUTCOME MEASURES

This Appendix consists of tables presenting the final step in the multiple regression/correlation analysis performed on the outcomes selected to summarize program impacts on the various domains of quality of life. These tables present the ANOVA table, the variables in the equations, the regression coefficients, and the confidence intervals for the variables, along with other statistical information.

These tables were xeroxed directly from computer printout produced by the Statistical Package for the Social Sciences (SPSS). SPSS allows eight characters to be used as a variable name, and does not print variable labels for those variables which are used as independent variables in the regression equations. For this reason, we present the following glossary of dependent and independent variable names.

DEPENDENT VARIABLES:

AGFAMWKS	Change in weeks employed for either one or two-adult families between the six-month period before the pre-Center interview and the six-month period preceding the follow-up interview
FAM2SCOR, FAM1SCOR	Family well-being summary score for two-adult (FAM2SCOR) and one-adult (FAM1SCOR) families
GFAMINC2	Gain in mean monthly family employment earnings between pre-Center and follow-up
GFAMOCC2, GFAMOCC1	Change in family occupational status between pre-Center and follow-up for two-adult families (GFAMOCC2) and for one-adult families (GFAMOCC1)
GWELFARE	Change in mean monthly family welfare receipts between pre-Center and follow-up
PER2FAM, PER1SCOR	Personal well-being summary score for two-adult (PER2FAM) and one-adult (PER2SCOR) families

INDEPENDENT VARIABLES:

AGEMOH, AGEWOH	Age in years of the MOH (man of the house) and the WOH (woman of the house)
COMPSTAT	A dichotomous variable indicating whether the family had completed Mountain-Plains training (scored "1") or was a completer-control (scored "0")
EDUCMOH, EDUCWOH	Number of years of education for the MOH and WOH
EINCMOH2, EINCWOH2	Employment earnings in the year prior to pre-Center standardized to June 1976 dollars
EMPLYMOH, EMPLYWOH	A dichotomous variable indicating whether the MOH or WOH was employed (1) or unemployed (0) at the time of the pre-Center interview
ETHMOH2, ETHWOH2	A dichotomous variable indicating the ethnicity of the MOH or WOH (white = 1; nonwhite = 0)
FUNEMRAT	The unemployment rate at the time of the follow-up interview based upon the state in which the family was living
NJOBMOH, NJOBWOH	The number of jobs held by the MOH and WOH in the year prior to the pre-Center interview
OCCMOH, OCCWOH	Occupational status of the primary job for the MOH and WOH in the year prior to pre-Center
PFAMSIZE	The number of persons comprising the family at pre-Center

INDEPENDENT VARIABLES, Continued

TIMEOUT	The number of months since program exit
WKUNMOH, WKUNWOH	The number of weeks unemployed for the MOH and WOH in the year prior to pre-Center

Table III-J1

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Mean Monthly Employment Earnings for Two-Adult Completer Families

```
DEPENDENT VARIABLE..    GFAMINC2   GAIN IN FAMILY EMPLOYMENT INCOME

MEAN RESPONSE       202.97852       STD. DEV.     359.60770

FINAL STEP.

MULTIPLE R               .46808       ANALYSIS OF VARIANCE    DF      SUM OF SQUARES        MEAN SQUARE              F      SIGNIFICANCE
R SQUARE                 .21909       REGRESSION              20.     14478067.38192        723903.36910          6.88787            .000
ADJUSTED R SQUARE        .18729       RESIDUAL               491.     51603277.38175        105098.32461
STD DEVIATION        324.18872        COEFF OF VARIABILITY   159.7 PCT


-------------------- VARIABLES IN THE EQUATION --------------------          ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE           B              STD ERROR B          F              BETA                 VARIABLE      PARTIAL    TOLERANCE        F
                                                   -------------   ----------                                                   -----------
                                                   SIGNIFICANCE    ELASTICITY                                                   SIGNIFICANCE

ETHMOH2       118.62200         68.234262        3.0222159        .1147845
                                                       .083         .50222
EMPLYMOH       76.792728        32.630548        5.5384911        .1066937
                                                       .019         .17808
NJOBMOH         5.7717689       13.205075         .19104521       .0192242
                                                       .662         .05993
OCCMOH         -.16493106        .77432413        .45369010E-01  -.0090700
                                                       .831        -.01929
EDUCMOH        -3.0689629        9.4778787         .10484820      -.0142713
                                                       .746        -.16076
AGEMOH           .91222215       4.0683760         .50275808E-01  .0183718
                                                       .823         .12144
EINCMOH2       -.47394045E-01    .93130133E-02   25.898052        -.3127189
                                                        0         -1.09335
WKUNMOH         1.7748957        1.5432001        1.3226842        .0757132
                                                       .251         .13070
EMPLYWOH       23.592667        45.811547          .26521869       .0271482
                                                       .607         .02543
EDUCWOH        16.410654         9.5311400        2.9645726        .0756043
                                                       .086         .88271
OCCWOH           .95111756       1.0407080         .83523865       .0512547
                                                       .361         .07546
EINCWOH2         .17217577E-02   .18209304E-01    .89404087E-02   .0070009
                                                       .925         .00796
NJOBWOH        35.952178        25.990573         1.9134570        .0807837
                                                       .167         .12558
ETHWOH2       -92.326738        67.751153         1.8570414       -.0913699
                                                       .174        -.38734
AGEWOH         -2.8371403        4.6240472         .37645850      -.0479737
                                                       .540        -.33751
WKUNWOH         3.4785918        1.6764267        4.3056408        .1722978
                                                       .039         .67543
PFAMSIZE        5.4704047       11.718358          .21792418       .0241604
                                                       .641         .10764
```

Table III-J1

```
TWO-PARENT FAMILIES
FUNEMRAT    -9.7414320      8.8240107      1.2187470       -.0459287
                                                .270         -.28349
TIMEOUT     17.485414       2.4234213     52.058778        .2999432
                                                  0           .91831
COMPSTAT    16.422245      49.035648       .11216083       .0135695
                                                .738          .07301
(CONSTANT) -122.22246     209.15853        .34146867
                                                .559


ALL VARIABLES ARE IN THE EQUATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B           STD ERROR B          T             95.0 PCT CONFIDENCE INTERVAL

ETHMOH2      118.62200       68.234262      1.7384521        -15.445173     ,  252.68917
EMPLYMOH     76.792728       32.630548      2.3533999         12.679991     ,  140.90547
NJOBMOH      5.7717689       13.205075      .43708719        -20.173657     ,  31.717195
OCCMOH      -.16493106       .77432413     -.21300002        -1.6863287     ,  1.3564666
EDUCMOH     -3.0689629       9.4778787     -.32380272        -21.691168     ,  15.553242
AGEMOH       .91222215       4.0683760      .22422248        -7.0813524     ,  8.9057967
EINCMOH2    -.47394045E-01   .93130133E-02 -5.0890129        -.65692321E-01 , -.29095769E-01
WKUNMOH      1.7748957       1.5432801      1.1500801        -1.2573522     ,  4.8071437
EMPLYWOH     23.592667       45.811547      .51499388        -66.418194     ,  113.60353
EDUCWOH      16.410654       9.5311400      1.7217934        -2.3161987     ,  35.137507
OCCWOH       .95111756       1.0407080      .91391392        -1.0936731     ,  2.9959082
EINCWOH2     .17217577E-02   .18209304E-01  .94553734E-01    -.34056015E-01 ,  .37499531E-01
NJOBWOH      35.952178       25.990573      1.3832776        -15.114288     ,  87.018643
ETHWOH2     -92.326738       67.751153     -1.3627331        -225.44469     ,  40.791219
AGEWOH      -2.8371463       4.6240472     -.61356214        -11.922502     ,  6.2482211
WKUNWOH      3.4785916       1.6764267      2.0750038         .18473647     ,  6.7724472
FAMSIZE      5.4704047       11.718358      .46682350        -17.553909     ,  28.494719
FUNEMRAT    -9.7414320       8.8240107     -1.1039687        -27.078912     ,  7.5960482
TIMEOUT      17.485414       2.4234213      7.2151769         12.723858     ,  22.246970
COMPSTAT     16.422245       49.035648      .33490421        -79.923351     ,  112.76784
CONSTANT    -122.22246       209.15853     -.58435320        -533.17864     ,  288.73373
```

Table III-J1

```
* * * * * * * * * * * * * * * * * * * * * * * * * *  M U L T I P L E   R E G R E S S I O N  * * * * * * * * * * * * * * * * * * * * * * * *

DEPENDENT VARIABLE..    GFAMINC2   GAIN IN FAMILY EMPLOYMENT INCOME

                                                  S U M M A R Y   T A B L E

STEP       VARIABLE                  F TO      SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R          OVERALL F   SIGNIFICANCE
      ENTERED   REMOVED       ENTER OR REMOVE                                     CHANGE

  1   ETHMOH2                     1.80439         .180         .03887     .00151    .00151   -.03887           7.88739        .000
      EMPLYMOH                    3.32280         .069         .05102     .00260    .00109   -.03387
      NJOBMOH                      .36141         .548         .07446     .00554    .00294   -.05538
      OCCMOH                       .41885         .518         .09371     .00878    .00324   -.05980
      EDUCMOH                      .00620         .937         .09999     .01000    .00122   -.04526
      AGEMOH                       .03448         .853         .10514     .01105    .00106    .03664
      EINCMOH2                   22.50384         .000         .32987     .10882    .09776   -.31579
      WKUNMOH                     1.49865         .221         .33386     .11146    .00265    .25082
  2   EMPLYWOH                     .01983         .888         .33508     .11228    .00082   -.00624           4.78595        .000
      EDUCWOH                     3.53594         .061         .34401     .11834    .00606    .05465
      OCCWOH                      1.86145         .173         .34627     .11990    .00156    .03887
      EINCWOH2                     .04361         .835         .35479     .12587    .00597   -.00857
      NJOBWOH                      .93904         .333         .35548     .12637    .00049    .03189
      ETHWOH2                      .83848         .360         .35709     .12751    .00114   -.02337
      AGEWOH                       .42658         .514         .35800     .12817    .00066    .03779
      WKUNWOH                     3.31809         .069         .36602     .13397    .00581    .04761
  3   PFAMSIZE                     .79790         .372         .36793     .13537    .00140    .05693           4.54952        .000
  4   FUNEMRAT                     .07167         .789         .36810     .13549    .00013    .04559           4.29268        .000
  5   TIMEOUT                    52.54686         .000         .46788     .21892    .08342    .30604           7.25758        .000
  6   COMPSTAT                     .11216         .738         .46808     .21909    .00018    .04099           6.88787        .000
```

Table III-J2

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Mean Monthly Employment Earnings for One-Adult Completer Families

```
DEPENDENT VARIABLE..   GFAMINC2   GAIN IN FAMILY EMPLOYMENT INCOME

MEAN RESPONSE       118.65868      STD. DEV.     239.01842

FINAL STEP.

MULTIPLE R              .43313          ANALYSIS OF VARIANCE      DF      SUM OF SQUARES        MEAN SQUARE              F      SIGNIFICANCE
R SQUARE                .18760          REGRESSION               12.        1779137.76183       148261.48015          2.96353          .001
ADJUSTED R SQUARE       .12430          RESIDUAL                154.        7704409.78308        50028.63496
STD DEVIATION        223.67082          COEFF OF VARIABILITY    188.5 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------          ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE          B               STD ERROR B          F             BETA            VARIABLE       PARTIAL     TOLERANCE        F
                                                   ------------   ----------                                               ------------
                                                   SIGNIFICANCE   ELASTICITY                                               SIGNIFICANCE

ETHWOH2      95.287502         58.195019           2.6810212       .1269697
                                                         .104         .71167
AGEWOH       5.9618777         2.6772737           4.9588455       .1897069
                                                         .027        1.49288
NJOBWOH      22.740628         23.085654           .97033241       .0928736
                                                         .326         .25247
EDUCWOH      41.465450         13.358875           9.6345848       .2400581
                                                         .002        3.96533
OCCWOH       .89961163         1.0058966           .79984061       .0770458
                                                         .373         .19975
EMPLYWOH     21.551993         49.033770           .19318985       .0447104
                                                         .661         .07722
EINCWOH2     -.27596281E-01    .18034889E-01       2.3413923      -.2216807
                                                         .128        -.49732
WKUNWOH      1.4736891         1.9988991           .54353814       .1254505
                                                         .462         .33064
PFAMSIZE     -38.041714        16.529481           5.2966552      -.1934954
                                                         .023       -1.03474
FUNEMRAT     -3.2552544        11.459181           .80697987E-01  -.0218503
                                                         .777        -.16114
TIMEOUT      6.2989347         3.2470438           3.7632053       .1544233
                                                         .054         .52353
COMPSTAT     12.899184         46.970586           .75417567E-01   .0213040
                                                         .784         .08788
(CONSTANT)   -587.14478        204.63077           8.2328185
                                                         .005

ALL VARIABLES ARE IN THE EQUATION.
```

Table III-J2

```
DEPENDENT VARIABLE..    GFAMINC2   GAIN IN FAMILY EMPLOYMENT INCOME


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B            STD ERROR B         T              95.0 PCT CONFIDENCE INTERVAL

ETHWOH2      95.287502        58.195019       1.6373824        -19.676064     ,  210.25107
AGEWOH       5.9618777        2.6772737       2.2268465         .67295541     ,  11.250800
NJOBWOH      22.740628        23.085654       .98505452        -22.864806     ,  68.346062
EDUCWOH      41.465450        13.358875       3.1039628         15.075152     ,  67.855748
OCCWOH       .69961163        1.0058966       .89433809        -1.0875251     ,  2.8867484
EMPLYWOH     21.551993        49.033770       .43953367        -75.313635     ,  118.41762
EINCWOH2    -.27596281E-01    .18034889E-01  -1.5301609        -.63223989E-01 ,  .80314268E-02
WKUNWOH      1.4736891        1.9988991       .73725039        -2.4751122     ,  5.4224905
PFAMSIZE    -38.041714        16.529481      -2.3014463        -70.695508     , -5.3879208
FUNEMRAT    -3.2552544        11.459181      -.28407391        -25.892730     ,  19.382221
TIMEOUT      6.2989347        3.2470438       1.9398983        -.11556165     ,  12.713431
COMPSTAT     12.899184        46.970586       .27462259        -79.890648     ,  105.68902
CONSTANT    -587.14478        204.63077      -2.8692888        -991.39042     , -182.89914
```

Table III-J2

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * *  M U L T I P L E   R E G R E S S I O N  * * * * * * * * * * * * * * * * * * * * * * * * * *

DEPENDENT VARIABLE..    GFAMINC2   GAIN IN FAMILY EMPLOYMENT INCOME

                                                          S U M M A R Y   T A B L E

STEP       VARIABLE                   F TO        SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R          OVERALL F   SIGNIFICANCE
      ENTERED    REMOVED         ENTER OR REMOVE                                      CHANGE

  1   ETHWOH2                          1.25105         .265        .12001    .01440    .01440    .12001           3.38273        .001
      AGEWOH                           5.62624         .019        .16214    .02629    .01189    .11097
      MJOBWOH                          1.58734         .210        .16214    .02629    .00000    .00586
      EDUCWOH                         12.49119         .001        .28449    .08093    .05464    .24914
      OCCWOH                           1.64418         .202        .28833    .08314    .00220    .08569
      EMPLYWOH                          .02555         .873        .30157    .09094    .00780   -.01539
      EINCWOH2                         3.45996         .065        .38116    .14528    .05434   -.11785
      WKUNWOH                           .17610         .675        .38240    .14623    .00095    .09735
  2   PFAMSIZE                         3.74724         .055        .40760    .16613    .01990   -.11464           3.47551        .001
  3   FUNEMRAT                          .06046         .806        .40799    .16646    .00032    .01436           3.11529        .001
  4   TIMEOUT                          3.95662         .048        .43267    .18720    .02075    .15683           3.24545        .001
  5   COMPSTAT                          .07542         .784        .43313    .18760    .00040    .02982           2.96353        .001
```

Table III-J3

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Tables from Analysis of Change in Mean Monthly Welfare Income for Two-Adult Completer Families with Spouse Education Less Than 12 Years, and Male HOH Age Less Than 24 Years

```
DEPENDENT VARIABLE..   GWELFARE   INCREASE IN WELFARE INCOME

MEAN RESPONSE          6.29310      STD. DEV.      75.60251

FINAL STEP.

MULTIPLE R               .48631        ANALYSIS OF VARIANCE     DF       SUM OF SQUARES         MEAN SQUARE             F      SIGNIFICANCE
R SQUARE                 .23650        REGRESSION               20.       155452.59635         7772.62982         1.47133            .110
ADJUSTED R SQUARE        .07576        RESIDUAL                 95.       501857.43814         5282.70988
STD DEVIATION          72.68225        COEFF OF VARIABILITY   1155.0 PCT


-------------------- VARIABLES IN THE EQUATION --------------------          ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE           B              STD ERROR B          F               BETA               VARIABLE      PARTIAL    TOLERANCE        F
                                                  -------------    -----------                                                ------------
                                                  SIGNIFICANCE      ELASTICITY                                                SIGNIFICANCE

ETHMOH2       -43.742636        51.046853         .73429735        -.2544490
                                                       .396        -5.15324
EMPLYMOH      -22.724587        16.996616         1.7875867        -.1426131
                                                       .184        -1.21405
NJOBMOH        7.1166946        5.8036354         1.5036834         .1334168
                                                       .223         2.81743
AGEMOH        -.61348493        5.4234051         .12795490E-01    -.0135405
                                                       .910        -2.01358
OCCMOH        -.26286998        .57218269         .21106322        -.0486345
                                                       .647        -.77709
EINCMOH2       .74493067E-02    .56440713E-02     1.7419943         .2112639
                                                       .190         5.00719
EDUCMOH        12.665293        6.5071281         3.7883646         .2560161
                                                       .055         20.85436
WKUNMOH        1.0361678        .80920560         1.6396172         .2085322
                                                       .203         2.71959
EDUCWOH        1.7790874        5.6934753         .97642476E-01     .0318857
                                                       .755         2.80267
WKUNWOH       -.34135365        1.2739038         .71801877E-01    -.0610423
                                                       .789        -2.38059
OCCWOH        -.40671634        .66911486         .36947231        -.0867268
                                                       .545        -.87918
AGEWOH         5.2697570        3.2637841         2.6069838         .2071355
                                                       .110         16.23518
EMPLYWOH      -22.288374        31.386128         .50429108        -.0901720
                                                       .479        -.36638
NJOBWOH       -32.414671        15.032875         4.6494238        -.3420636
                                                       .034        -3.50789
EINCWOH2       .15395329E-01    .16805956E-01     .83917243         .2187281
                                                       .362         1.52888
ETHWOH2        81.856423        52.146979         2.4640370         .4761552
                                                       .120         9.64336
PFAMSIZE      -7.7600923        11.324365         .46957620        -.0760549
```

Table III-J3

```
FUNEMRAT     5.9423215       5.1339189        1.3397208         .1211822
                                                   .250          5.50438
TIMEOUT     -1.2384029       1.2794980        .93679534        -.0992180
                                                   .336         -1.91359
COMPSTAT    -2.4235415       21.531446        .12669355E-01    -.0116570
                                                   .911          -.32535
(CONSTANT)  -275.48987       145.41286        3.5892656
                                                   .061


ALL VARIABLES ARE IN THE EQUATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE           B            STD ERROR B          T                 95.0 PCT CONFIDENCE INTERVAL

ETHMOH2      -43.742636       51.046853       -.85691152          -145.08345      ,  57.598181
EMPLYMOH     -22.724587       16.996616       -1.3370066          -56.467136      ,  11.017961
NJOBMOH       7.1166946       5.8036354        1.2262477          -4.4049785      ,  18.638368
AGEMOH       -.61348493       5.4234051       -.11311803          -11.380305      ,  10.153336
OCCMOH       -.26286998       .57218269       -.45941617          -1.3987962      ,  .87305628
EINCMOH2      .74493067E-02   .56440713E-02    1.3198643          -.37555916E-02,    .18654205E-01
EDUCMOH       12.665293       6.5071281        1.9463722          -.25298962      ,  25.583576
WKUNMOH       1.0361678       .80920560        1.2804756          -.57030840      ,  2.6426441
EDUCWOH       1.7790874       5.6934753        .31247828          -9.5238902      ,  13.082065
WKUNWOH      -.34135365       1.2739038       -.26795872          -2.8703726      ,  2.1876653
OCCWOH       -.40671634       .66911486       -.60784234          -1.7350773      ,  .92164462
AGEWOH        5.2697570       3.2637841        1.6146157          -1.2096737      ,  11.749188
EMPLYWOH     -22.288374       31.386128       -.71013455          -84.597717      ,  40.020969
NJOBWOH      -32.414671       15.032875       -2.1562522          -62.258702      , -2.5706402
EINCWOH2      .15395329E-01   .16805956E-01    .91606382          -.17968713E-01,    .48759371E-01
ETHWOH2       81.856423       52.146979        1.5697251          -21.668420      ,  185.38127
PFAMSIZE     -7.7600923       11.324365       -.68525630          -30.241799      ,  14.721614
FUNEMRAT      5.9423215       5.1339189        1.1574631          -4.2497961      ,  16.134439
TIMEOUT      -1.2384029       1.2794980       -.96788188          -3.7785276      ,  1.3017218
COMPSTAT     -2.4235415       21.531446       -.11255823          -45.168868      ,  40.321785
CONSTANT     -275.48987       145.41286       -1.8945357          -564.17090      ,  13.191171
```

Table III-J3

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * M U L T I P L E   R E G R E S S I O N * * * * * * * * * * * * * * * * * * * * * * * * * * *
DEPENDENT VARIABLE..   GWELFARE   INCREASE IN WELFARE INCOME

                                                  S U M M A R Y   T A B L E
STEP       VARIABLE                    F TO        SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE   SIMPLE R          OVERALL F   SIGNIFICANCE
        ENTERED   REMOVED        ENTER OR REMOVE                                        CHANGE

  1     ETHMOH2                        2.79501        .097        .17701      .03133    .03133     .17701           1.76119        .093
        EMPLYMOH                       4.87988        .029        .27671      .07657    .04524    -.20446
        NJOBMOH                         .54492        .462        .28279      .07997    .00340     .07306
        AGEMOH                          .61405        .435        .29893      .08936    .00939     .07828
        OCCMOH                          .34847        .556        .30828      .09504    .00568    -.07450
        EINCMOH2                        .51467        .475        .31048      .09640    .00136     .02221
        EDUCMOH                        2.05037        .155        .33512      .11231    .01591     .15665
        WKUNMOH                         .49038        .485        .34111      .11636    .00405     .01824
  2     EDUCWOH                         .12236        .727        .34119      .11641    .00005     .03072           1.70578        .058
        WKUNWOH                         .09336        .761        .34395      .11830    .00189     .07066
        OCCWOH                          .11868        .731        .36455      .13289    .01459    -.15828
        AGEWOH                         3.27253        .073        .37818      .14302    .01012     .05375
        EMPLYWOH                        .76177        .385        .38798      .15053    .00751    -.17731
        NJOBWOH                        5.47577        .021        .43845      .19224    .04171    -.18153
        EINCWOH2                        .91545        .341        .44470      .19776    .00552    -.06873
        ETHWOH2                        2.31711        .131        .46487      .21611    .01835     .16576
  3     PFAMSIZE                        .46136        .499        .46881      .21978    .00367    -.13814           1.62386        .072
  4     FUNEMRAT                       1.09429        .298        .47800      .22848    .00870     .08956           1.59590        .076
  5     TIMEOUT                         .99500        .321        .48621      .23640    .00791    -.05123           1.56419        .082
  6     COMPSTAT                        .01267        .911        .48631      .23650    .00010    -.10334           1.47133        .110
```

Table III-J4

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Change in Mean Monthly Welfare Income for Two-Adult Completer Families with Spouse Education Less Than 12 Years, and Male HOH Age 24 or Older, White Spouse

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

MEAN RESPONSE        26.45794      STD. DEV.      112.30100

VARIABLE ETHWOM2  IS A CONSTANT.  INCLUSION LEVEL SET TO ZERO.

FINAL STEP.


MULTIPLE R               .40607         ANALYSIS OF VARIANCE     DF       SUM OF SQUARES         MEAN SQUARE              F      SIGNIFICANCE
R SQUARE                 .16469         REGRESSION               19.        220427.01621         11601.42141          .90409           .579
ADJUSTED R SQUARE      -.01749          RESIDUAL                 87.       1116393.54453         12832.10971
STD DEVIATION        113.27890          COEFF OF VARIABILITY   428.1 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------        ---------- VARIABLES NOT IN THE EQUATION -----------

VARIABLE            B             STD ERROR B          F            BETA        VARIABLE       PARTIAL     TOLERANCE          F
                                               ------------   ----------                                            ------------
                                               SIGNIFICANCE   ELASTICITY                                            SIGNIFICANCE

ETHMOM2       20.334463        68.451250       .88247547E-01   .0418543     ETHWOM2        1.00000     1.00000            0
                                                        .767     .72546                                                  1.000
EDUCMOM       5.6057058        8.4859459       .43637523       .0830472
                                                        .511    2.13456
NJOBMOM       9.4122091        13.916754       .65741167       .0907111
                                                        .501     .66494
AGEMOM        1.7946431        3.5534618       .25506619       .1235319
                                                        .615    2.23712
EMPLYMOM     -19.929474        31.841561       .39174456      -.0889590
                                                        .533    -.35199
OCCMOM        .25415046        .62042778       .16780285       .0501776
                                                        .683     .22138
EINCMOM2      .68176940E-03    .84483601E-02   .65122059E-02   .0152100
                                                        .936     .11225
WKCNMOM       .26549570        1.4618472       .32982329E-01   .0442525
                                                        .856     .18691
EDUCWOM       2.9753699        8.3948701       .12561852       .0383974
                                                        .724    1.06466
OCCWOM       -.19022982        1.6511959       .13272723E-01  -.0181854
                                                        .909    -.06330
EMPLYWOM      4.4885192        40.072164       .12546442E-01   .0143204
                                                        .911     .02537
WKCNWOM       1.2794763        1.8439365       .48147416       .1897252
                                                        .490    2.01119
NJOBWOM      -12.464367        26.109623       .22789736      -.0895788
                                                        .634    -.29499
AGEWOM       -.81713017        3.9548373       .42689911E-01  -.0465969
                                                        .837    -.85754
EINCWOM2      .69817559E-02    .18034608E-01   .14987041       .1059208
                                                        .700     .23488
PFAMSIZE      6.6186849        9.4152552       .49417324       .0968032
                                                        .484    1.25547
```

Table III-J4

```
2-ADULT FAMILIES,HIGH SPOUSE EDUC, HIGH MOM AGE, WHITE
FUNEMRAT     -3.0952909        7.4542235        .17242416        -.0479321
                                                     .679         -.67657
TIMEOUT       .40558425        1.9176080        .44734492E-01    .0231922
                                                     .833          .16504
COMPSTAT     -137.35327        48.495737        8.0217823        -.3232013
                                                     .006         -4.80324
(CONSTANT)   -79.149662        223.01471        .12595955
                                                     .724


ALL VARIABLES ARE IN THE EQUATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE           B           STD ERROR B           T               95.0 PCT CONFIDENCE INTERVAL

ETHMOM2       20.334463        68.451250        .29706409        -115.71981      ,  156.38873
EDUCMOM       5.6057058        8.4859459        .66058704        -11.261031      ,  22.472442
NJOBMOM       9.4122091        13.916754        .67632216        -18.248846      ,  37.073265
AGEMOM        1.7946431        3.5534618        .50504079        -5.2682470      ,  8.8575333
EMPLYMOM     -19.929474        31.841561       -.62589500        -83.218024      ,  43.359077
OCCMOM        .25415046        .62042778        .40963746        -.97901694      ,  1.4873179
EINCMOM2      .68176940E-03    .84483801E-02    .80698240E-01    -.16110301E-01,   .17473840E-01
WKONMOM       .26549570        1.4618972        .18161038        -2.6401833      ,  3.1711747
EDUCWOM       2.9753689        8.3948701        .35442703        -13.710345      ,  19.661082
OCCWOM       -.19022982        1.6511959       -.11520730        -3.4721604      ,  3.0917008
EMPLYWOM      4.4885192        40.072164        .11201090        -75.159246      ,  84.136285
WKONWOM       1.2794783        1.8439385        .69388359        -2.3855491      ,  4.9445057
NJOBWOM      -12.464367        26.109623       -.47738547        -64.360070      ,  39.431335
AGEWOM       -.81713017        3.9548373       -.20661537        -8.6777976      ,  7.0435373
EINCWOM2      .69817559E-02    .18034608E-01    .38713100        -.28863981E-01,   .42827492E-01
PFAMSIZE      6.6186949        9.4152552        .70297456        -12.095154      ,  25.332524
FUNEMRAT     -3.0952909        7.4542235       -.41523948        -17.911367      ,  11.720786
TIMEOUT       .40558425        1.9176080        .21150530        -3.4058693      ,  4.2170378
COMPSTAT     -137.35327        48.495737       -2.8322751        -233.74380      , -40.962739
CONSTANT     -79.149662        223.01471       -.35490781        -522.41555      ,  364.11623
```

Table III-J4

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

                                        S U M M A R Y   T A B L E
STEP       VARIABLE                 F TO       SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R          OVERALL F   SIGNIFICANCE
       ENTERED   REMOVED      ENTER OR REMOVE                                      CHANGE

  1    ETHMOM2                      .04770       .828        .07623     .00581    .00581    .07623            .44863        .889
       EDUCMOM                      .00359       .952        .07627     .00582    .00001   -.00226
       NJOBMOM                      .29311       .589        .07636     .00583    .00001    .00973
       AGEMOM                       .79262       .375        .10729     .01151    .00568    .05646
       EMPLYMOM                    1.12497       .292        .11473     .01316    .00165   -.05998
       OCCMOM                       .03527       .851        .11703     .01370    .00053    .04743
       EINCMOM2                     .89847       .346        .18677     .03488    .02119    .10011
       WKUNMOM                      .04520       .832        .18796     .03533    .00044   -.04200
  2    EDUCWOM                      .00015       .990        .19259     .03709    .00176   -.06254            .50458        .932
       OCCWOM                       .07027       .783        .21054     .04433    .00723   -.06910
       EMPLYWOM                     .43469       .511        .21056     .04434    .00001   -.03478
       WKUNWOM                     1.46154       .230        .26424     .06982    .02549    .16724
       NJOBWOM                      .31778       .579        .26832     .07199    .00217   -.11134
       AGEWOM                       .11383       .737        .26947     .07261    .00062    .02855
       EINCWOM2                     .41154       .523        .27710     .07679    .00418   -.13805
  3    PFAMSIZE                     .68811       .409        .28947     .08379    .00701    .18004            .51443        .933
  4    FUNEMRAT                     .28498       .597        .29441     .08668    .00288   -.07128            .49683        .948
  5    TIMEOUT                      .11702       .733        .29646     .08789    .00121   -.05562            .47108        .964
  6    COMPSTAT                    8.02178       .006        .40607     .16489    .07700   -.31864            .90409        .579
```

Table III-J5

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Change in Mean Monthly Welfare Income for Two-Adult Completer Families with Spouse Education of 12 or More Years

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

MEAN RESPONSE        20.56767      STD. DEV.       62.45969

FINAL STEP.


MULTIPLE R              .51230          ANALYSIS OF VARIANCE     DF      SUM OF SQUARES          MEAN SQUARE               F      SIGNIFICANCE
R SQUARE                .26245          REGRESSION               20.       271330.37966          13566.51898          4.35913          .000
ADJUSTED R SQUARE       .20225          RESIDUAL                245.       762490.90230           3112.20776
STD DEVIATION         55.78716          COEFF OF VARIABILITY    271.2 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------        ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE              B           STD ERROR B           F              BETA             VARIABLE       PARTIAL     TOLERANCE          F
                                                  ------------     ----------                                                  ------------
                                                  SIGNIFICANCE     ELASTICITY                                                  SIGNIFICANCE

ETHMOH2      -43.489421        18.983383          5.2483166        -.1839512
                                                       .023        -1.95547
OCCMOH         .24486478        .18026259         1.8451915         .0808998
                                                       .176          .31563
EMPLYMOH      -8.2576189        7.7851127         1.1250708        -.0661814
                                                       .290         -.20829
NJOBMOH        3.3452866        3.3276176         1.0106478         .0608933
                                                       .316          .33202
EDUCMOH       -6.7685490        2.3794665         8.0915543        -.1809698
                                                       .005        -3.60016
AGEMOH        -1.5721464         .99818845        2.4806238        -.1637711
                                                       .117        -2.09054
EINCMOH2       .45934489E-02    .21622219E-02     4.5131240         .1742248
                                                       .035         1.12316
WKUNMOH       -.32100729         .37929002         .71628681       -.0706665
                                                       .398         -.20067
EDUCWOH       36.433549         7.5337717        23.387189          .2879380
                                                       .000         21.50984
OCCWOH        -.22479561         .24682059         .82949332       -.0788239
                                                       .363         -.21366
EMPLYWOH     -19.139631        10.238925          3.4942857        -.1397643
                                                       .063         -.27287
NJOBWOH       -.10164918        6.4114499          .25135949E-03   -.0013229
                                                       .987         -.00366
ETHWOH2       -.34489291       18.072809           .36418096E-03   -.0015548
                                                       .985         -.01532
EINCWOH2      -.11973378E-02    .41472949E-02      .83349605E-01   -.0289573
                                                       .773         -.06328
AGEWOH         1.3236756        1.1691505         1.2818059         .1166056
                                                       .259         1.56320
WKUNWOH       -.36109586         .35660484        1.0253462        -.1109019
                                                       .312         -.64708
PFAMSIZE      10.218273         2.9412295        12.069719          .2499700
                                                       .001         [illegible]
```

Table III-J5

```
2-ADULT FAMILIES: HIGH EDUCWOH
FUNEMRAT      6.9736268        2.1076948        10.947172          .1922893
                                                     .001           2.02313
TIMEOUT      -.47197497        .58922323        .64162049         -.0466086
                                                     .424            -.25449
COMPSTAT     -4.8358209        12.857278        .14146284         -.0213655
                                                     .707            -.21567
(CONSTANT)   -370.96849        100.69514        13.572411
                                                     .000


ALL VARIABLES ARE IN THE EQUATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B              STD ERROR B            T               95.0 PCT CONFIDENCE INTERVAL

ETHMOH2      -43.489421        18.983383       -2.2909205          -80.880876      , -6.0979665
OCCMOH        .24486478        .18026259        1.3583783          -.11019735      ,  .59992690
EMPLYMOH     -8.2576189        7.7851127       -1.0606936          -23.591908      ,  7.0766705
NJOBMOH       3.3452866        3.3276176        1.0053098          -3.2091016      ,  9.8996747
EDUCMOH      -6.7685490        2.3794665       -2.8445657          -11.455370      , -2.0817282
AGEMOH       -1.5721464        .99818845       -1.5749996          -3.5382722      ,  .39397930
EINCMOH2      .45934489E-02    .21622219E-02    2.1244115           .33453360E-03,   .88523643E-02
WKUNMOH      -.32100729        .37929002       -.84633729          -1.0680925      ,  .42607797
EDUCWOH       36.433549        7.5337717        4.8360303           21.594324      ,  51.272773
OCCWOH       -.22479561        .24682059       -.91076524          -.71095662      ,  .26136540
EMPLYWOH     -19.139631        10.238925       -1.8693009          -39.307179      ,  1.0279171
NJOBWOH      -.10164918        6.4114499       -.15854321E-01      -12.730243      ,  12.526945
ETHWOH2      -.34489291        18.072809       -.19083526E-01      -35.942794      ,  35.253009
EINCWOH2     -.11973378E-02    .41472949E-02   -.28870332          -.93662394E-02,   .69715638E-02
AGEWOH        1.3236756        1.1691505        1.1321687          -.97919307      ,  3.6265442
WKUNWOH      -.36109586        .35660484       -1.0125938          -1.0634983      ,  .34130654
PFAMSIZE      10.218273        2.9412295        3.4741502           4.4249511      ,  16.011595
FUNEMRAT      6.9736268        2.1076948        3.3086511           2.8221131      ,  11.125140
TIMEOUT      -.47197497        .58922323       -.80101217          -1.6325644      ,  .68861444
COMPSTAT     -4.8358209        12.857278       -.37611546          -30.160723      ,  20.489081
CONSTANT     -370.96849        100.69514       -3.6840754          -569.30709      , -172.62988
```

Table III-J5

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

                                        S U M M A R Y   T A B L E

STEP       VARIABLE                  F TO      SIGNIFICANCE  MULTIPLE R   R SQUARE  R SQUARE  SIMPLE R          OVERALL F    SIGNIFICANCE
     ENTERED    REMOVED        ENTER OR REMOVE                                      CHANGE

  1  ETHMOH2                       6.94698         .009          .13873     .01925    .01925   -.13873           3.00180         .003
     OCCMOH                        1.05983         .304          .15055     .02267    .00342    .06200
     EMPLYMOH                       .00149         .969          .15057     .02267    .00000   -.01199
     NJOBMOH                        .16925         .681          .15353     .02357    .00090    .01556
     EDUCMOH                      11.27646         .001          .26980     .07279    .04922   -.22173
     AGEMOH                         .59269         .442          .27365     .07488    .00209    .09827
     EINCMOH2                      1.00440         .317          .29102     .08469    .00981    .03241
     WKUNMOH                        .21438         .644          .29233     .08546    .00076   -.04967
  2  EDUCWOH                      17.84536         .000          .38522     .14840    .06294    .22109           3.84933         .000
     OCCWOH                         .39909         .528          .40088     .16070    .01231   -.10398
     EMPLYWOH                      4.90526         .026          .42127     .17747    .01676   -.11965
     NJOBWOH                        .59260         .442          .42189     .17798    .00052   -.14871
     ETHWOH2                        .08489         .771          .42204     .17812    .00014   -.01694
     EINCWOH2                       .07791         .780          .42239     .17840    .00028   -.10714
     AGEWOH                        5.21492         .023          .44056     .19407    .01567    .15780
     WKUNWOH                       1.31225         .253          .44531     .19830    .00423    .09263
  3  PFAMSIZE                      9.78910         .002          .47827     .22874    .03044    .23963           4.32661         .000
  4  FUNEMRAT                     10.52243         .001          .51015     .26026    .03151    .18076           4.82772         .000
  5  TIMEOUT                        .59091         .443          .51189     .26203    .00177   -.03579           4.59716         .000
  6  COMPSTAT                       .14146         .707          .51230     .26245    .00043   -.02945           4.35913         .000
```

Table III-J6

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Change in Mean Monthly Welfare Income for One-Adult (Female HOH) Completer Families with HOH Education Less Than 12 Years, Reporting One or More Jobs in Year Pre-Center

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

MEAN RESPONSE       39.42500       STD. DEV.     136.85382

FINAL STEP.


MULTIPLE R                .71508        ANALYSIS OF VARIANCE     DF      SUM OF SQUARES        MEAN SQUARE               F      SIGNIFICANCE
R SQUARE                  .51134        REGRESSION               12.       373500.73874        31125.06156        2.35446              .032
ADJUSTED R SQUARE         .29416        RESIDUAL                 27.       356929.03626        13219.59394
STD DEVIATION          114.97649        COEFF OF VARIABILITY    291.6 PCT


-------------------- VARIABLES IN THE EQUATION --------------------         ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE            B            STD ERROR B          F              BETA           VARIABLE       PARTIAL     TOLERANCE          F
                                                 ------------    ----------                                                ------------
                                                 SIGNIFICANCE    ELASTICITY                                                SIGNIFICANCE

ETHWOH2        9.8257704         69.748504      .19845563E-01     .0240473
                                                         .889       .21807
EINCWOH2     .14471761E-01    .27275664E-01      .28150887        .1721531
                                                         .600       .82365
OCCWOH       -.58895545        1.5656380         .14150840       -.0739907
                                                         .710      -.47990
EDUCWOH      -39.023577        32.401687        1.4505039        -.3014957
                                                         .239     -9.50225
NJOBWOH        2.9689066        34.349835       .74703983E-02     .0181754
                                                         .932       .12237
EMPLYWOH     -151.23551         73.742556       4.2060183        -.5505830
                                                         .050     -1.91602
AGEWOH         3.8149702        5.6087717        .46264383        .1702740
                                                         .502      2.74329
WKUNWOH      -.88454020         2.4268418        .13284714       -.1235133
                                                         .718      -.51603
PFAMSIZE       8.1625869        22.694187        .12936785        .0785257
                                                         .722       .74535
FUNEMRAT       4.5350211        15.078851       .90452824E-01     .0543035
                                                         .766       .68845
TIMEOUT        2.9794957        3.8916970        .58608803        .1224139
                                                         .451       .75385
COMPSTAT       34.401071        65.890238        .27258488        .1018293
                                                         .606       .69806
(CONSTANT)     261.11608        358.13956        .53157267
                                                         .472

ALL VARIABLES ARE IN THE EQUATION.
```

Table III-J6

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B           STD ERROR B            T              95.0 PCT CONFIDENCE INTERVAL

ETHWOM2      9.8257704        69.748504       .14087428           -133.28634     ,   152.93788
EINCWOM2    .14471761E-01    .27275664E-01   .53057410           -.41493280E-01,   .70436802E-01
OCCWOM      -.58895545        1.5656380     -.37617602           -3.8013792     ,   2.6234683
EDUCWOM     -39.023577        32.401687     -1.2043687           -105.50635     ,   27.459194
NJOBWOM      2.9689066        34.349835      .86431466E-01       -67.511134     ,   73.448948
EMPLYWOM    -151.23551        73.742556     -2.0508580           -302.54273     ,   .71720464E-01
AGEWOM       3.8149702        5.6087717      .68017926           -7.6932789     ,   15.323219
WKUNWOM     -.86454020        2.4268418     -.36448201           -5.8640084     ,   4.0949280
PFAMSIZE     8.1625869        22.694187      .35967743           -38.402039     ,   54.727213
FUNEMRAT     4.5350211        15.078851      .30075376           -26.404225     ,   35.474268
TIMEOUT      2.9794957        3.8918970      .76556386           -5.0060174     ,   10.965009
COMPSTAT     34.401071        65.890238      .52209662           -100.79453     ,   169.59667
CONSTANT     261.11608        358.13956      .72909030           -473.72560     ,   995.95776
```

Table III-J6

```
DEPENDENT VARIABLE..    GWELFARE    INCREASE IN WELFARE INCOME

                                                 S U M M A R Y   T A B L E

STEP        VARIABLE                    F TO       SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R         OVERALL F   SIGNIFICANCE
      ENTERED    REMOVED          ENTER OR REMOVE                                       CHANGE

  1   ETHWOH2                            .00026         .987        .01909     .00036    .00036    .01909          3.74769        .004
      EINCWOH2                           .00063         .980        .07547     .00570    .00533   -.07315
      OCCWOH                             .87168         .358        .25743     .06627    .06057   -.24392
      EDUCWOH                           2.33114         .137        .59471     .35368    .28742   -.57399
      NJOBWOH                            .01104         .917        .59484     .35383    .00014    .06538
      EMPLYWOH                          6.13498         .019        .67538     .45614    .10231   -.50509
      AGEWOH                            2,08255         .159        .69702     .48584    .02970    .19699
      WKUNWOH                            .35443         .556        .70118     .49165    .00581    .18813
  2   PFAMSIZE                           .27161         .606        .70442     .49621    .00456    .13588          3,28319        .007
  3   FUNEMRAT                           .04729         .829        .70500     .49703    .00082   -.13834          2,86576        .013
  4   TIMEOUT                            .53208         .472        .71163     .50641    .00938    .24810          2,61157        .020
  5   COMPSTAT                           .27258         .606        .71508     .51134    .00493    .04135          2,35446        .032
```

Table III-J7

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Change in Mean Monthly Welfare Income for One-Adult (Female HOH) Completer Families with HOH Education of 12 or More Years, Local Unemployment Rate Less Than 6%, and HOH Unemployed Less Than 48 Weeks in Year Pre-Center

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

MEAN RESPONSE        34.92308       STD. DEV.     108.09652

FINAL STEP.

MULTIPLE R               .52194         ANALYSIS OF VARIANCE      DF       SUM OF SQUARES         MEAN SQUARE             F      SIGNIFICANCE
R SQUARE                 .27242         REGRESSION                12.        162344.42182         13528.70182          1.21688            .307
ADJUSTED R SQUARE        .04855         RESIDUAL                  39.        433583.27049         11117.51976
STD DEVIATION         105.43965         COEFF OF VARIABILITY    301.9 PCT


-------------------- VARIABLES IN THE EQUATION --------------------       ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE           B             STD ERROR B        F               BETA            VARIABLE      PARTIAL     TOLERANCE        F
                                                 -------------   -----------                                            -----------
                                                 SIGNIFICANCE    ELASTICITY                                             SIGNIFICANCE

ETHWOH2      -83.817028         70.631279        1.4082196       -.1025545
                                                      .243       -2.26158
NJOBWOH      -12.449296         24.127126        .26624316       -.0875052
                                                      .609        -.65126
EDUCWOH       17.463940         34.239243        .26015739        .0911413
                                                      .613        6.13546
EINCWOH2     -.41258564E-03    .14505232E-01     .80905656E-03   -.0067714
                                                      .977        -.03478
OCCWOH       -1.3012769         1.0177351        1.6348199       -.2197721
                                                      .209       -1.27190
EMPLYWOH      25.031576         33.424655        .56084456        .1155212
                                                      .458         .41352
AGEWOH       -2.2772024         2.7126047        .70470058       -.1506658
                                                      .406       -1.93738
WKUNWOH       .60734032         1.9212307        .99932147E-01    .0829001
                                                      .754         .26120
PFAMSIZE     -13.067419         21.937149        .35482913       -.1139407
                                                      .555       -1.07936
FUNEMRAT     -17.168525         27.776063        .38205385       -.1057438
                                                      .540       -2.37391
TIMEOUT      -4.2101658         3.5530112        1.4041234       -.2062430
                                                      .243       -1.10123
COMPSTAT     -55.631712         45.710676        1.4811859       -.2122327
                                                      .231       -1.25600
(CONSTANT)    215.02914         485.07477        .19650665
                                                      .660


ALL VARIABLES ARE IN THE EQUATION.
```

Table III-J7

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B           STD ERROR B          T               95.0 PCT CONFIDENCE INTERVAL

ETHWOH2     -83.817028       70.631279     -1.1866843          -226.68228     ,  59.048220
NJOBWOH     -12.449296       24.127126     -.51598755          -61.251015     ,  36.352422
EDUCWOH      17.463940       34.239243      .51005626          -51.791467     ,  86.719347
EINCWOH2    -.41258564E-03   .14505232E-01 -.28443919E-01      -.29757186E-01 ,  .28927015E-01
OCCWOH      -1.3012769       1.0177351     -1.2786007          -3.3598405     ,  .75728673
EMPLYWOH     25.031576       33.424655      .74889556          -42.576171     ,  92.639323
AGEWOH      -2.2772024       2.7126847     -.83946446          -7.7641252     ,  3.2097204
WKUNWOH      .60734032       1.9212307      .31612046          -3.2787155     ,  4.4933961
PFAMSIZE    -13.067419       21.937149     -.59567535          -57.439491     ,  31.304653
FUNEMRAT    -17.168525       27.776063     -.61810505          -73.350915     ,  39.013866
TIMEOUT     -4.2101458       3.5530112     -1.1849571          -11.396809     ,  2.9764776
COMPSTAT    -55.631712       45.710676     -1.2170398          -148.09028     ,  36.826858
CONSTANT     215.02914       485.07477      .44329071          -766.12719     ,  1196.1855
```

Table III-J7

```
DEPENDENT VARIABLE..    GWELFARE   INCREASE IN WELFARE INCOME

                                        S U M M A R Y   T A B L E

STEP        VARIABLE                 F TO        SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R         OVERALL F   SIGNIFICANCE
     ENTERED    REMOVED         ENTER OR REMOVE                                          CHANGE

  1  ETHWOH2                           .90871        .346         .11883    .01412    .01412   -.11883          1.08404        .392
     NJOBWOH                           .05234        .820         .17206    .02961    .01549    .11801
     EDUCWOH                           .04817        .827         .24329    .05919    .02959    .15822
     EINCWOH2                          .06922        .794         .25014    .06257    .00338   -.09107
     OCCWOH                            .30458        .584         .26322    .06929    .00672   -.08679
     EMPLYWOH                          .51566        .477         .27983    .07830    .00902    .04774
     AGEWOH                           4.62399        .037         .40958    .16775    .08945   -.36837
     WKUNWOH                           .00406        .950         .40967    .16783    .00008    .08152
  2  PFAMSIZE                          .49794        .483         .42145    .17762    .00979   -.23469          1.00793        .449
  3  FUNEMRAT                          .65306        .424         .43648    .19052    .01289   -.12459           .96495        .487
  4  TIMEOUT                          2.87467        .098         .49476    .24479    .05427   -.33116          1.17867        .332
  5  COMPSTAT                         1.48179        .231         .52194    .27242    .02763   -.24010          1.21688        .307
```

Table III-J8

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Number of Weeks Employed for Two-Adult Completer Families

```
DEPENDENT VARIABLE..    AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY

MEAN RESPONSE         5.48415      STD. DEV.       8.07813

FINAL STEP.


MULTIPLE R               .68654       ANALYSIS OF VARIANCE     DF      SUM OF SQUARES        MEAN SQUARE              F     SIGNIFICANCE
R SQUARE                 .47133       REGRESSION               20.        10642.08526          532.10426          14.53231           .000
ADJUSTED R SQUARE        .43890       RESIDUAL                326.        11936.57757           36.61527
STD DEVIATION           6.05106       COEFF OF VARIABILITY    110.3 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------      ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE          B             STD ERROR B          F               BETA           VARIABLE        PARTIAL     TOLERANCE        F
                                                 ------------     ----------                                                ------------
                                                 SIGNIFICANCE     ELASTICITY                                                SIGNIFICANCE

ETHMOM2       2.9243435         1.6971456        2.9690573          .1273145          XXC01         -.06020       .02791      1.1822893
                                                      .086           .45640                                                      .278
EMPLYMOM      1.2114454          .74060790       2.6756605          .0746632          XXC02         -.06020       .02791      1.1822893
                                                      .103           .09867                                                      .278
NJOBMOM       -.15886470         .30432558        .27250716        -.0237895          XXC03         -.00266       .03477      .23011557E-02
                                                      .602          -.06278                                                      .962
OCCMOM        .54344083E-02     .17692796E-01     .94343412E-01     .0136899          XXC04          .02929       .03575      .27900719
                                                      .759           .02342                                                      .598
EDUCMOM       -.32874903         .21435325       2.3521705         -.0649266          XXC05         -.07223       .02119      1.7043735
                                                      .126          -.63262                                                      .193
AGEMOM        .75555009E-01     .92022284E-01     .67412512         .0705533          XXC06          .05296       .00842      .91401869
                                                      .412           .37404                                                      .340
EINCMOM2      .36344351E-03     .22065890E-03    2.7128822          .1020668          XXC07          .01329       .04442      .57431516E-01
                                                      .101           .30300                                                      .811
WKUNMOM       .22050383         .34417083E-01   41.047260           .4265968          XXC08         -.00740       .04632      .17783113E-01
                                                      .000           .61261                                                      .894
EMPLYWOM      1.9765889         1.0108475        3.8235025          .1070058          XXC09         -.05016       .05010      .81960830
                                                      .051           .09244                                                      .366
EDUCWOM       .25783076          .21595252       1.4255194          .0532505          XXC10         -.01802       .03642      .10551682
                                                      .233           .51473                                                      .746
OCCWOM        -.20605901E-02    .23636288E-01     .76001938E-02    -.0050031          XXC11          .04794       .04299      .74870246
                                                      .931          -.00641                                                      .388
NJOBWOM       .53006227          .57332923        .85476280         .0552904          XXC12          .00201       .04037      .13175104E-02
                                                      .356           .07326                                                      .971
EINCWOM2      .99487096E-03     .41476442E-03    5.7535377          .1903207          XXC13         -.04064       .03961      .53757379
                                                      .017           .18636                                                      .464
ETHWOM2       -.93511953        1.7054855         .30063407        -.0407114          XXC14          .02366       .04467      .16207191
                                                      .584          -.14594                                                      .670
AGEWOM        .23413824E-01     .10466455         .50043250E-01     .0183453          XXC15         -.03958       .08544      .50988426
                                                      .823           .10376                                                      .476
WKUNWOM       .31675782          .38259614E-01   68.544645           .7224624          XXC16          .07882       .08113      2.0319058
                                                      .000          2.23195                                                      .155
PFAMSIZE      -.60392156         .25889431       5.4414802         -.1219030          XXC17         -.03671       .05861      .43866583
                                                      .020          -.44175                                                      .508
```

Table III-J8

```
COVARIED REGRESSSION ON CHANGE IN FAMILY WEEKS EMPLOYED                                          02/10/77      PAGE   10
2-ADULT FAMILIES: CHANGE IN FAMILY WEEKS EMPLOYED
FUNEWRAT      .58616671        .19812494         8.7531426          .1256832         XXC18           .05666         .03997      1.0469066
                                                      .003            .61349                                                          .307
TIMEOUT       .21403343        .56902078E-01    14.148398           .1594251         XXC19          -.06446         .09281      1.3562156
                                                      .000            .40479                                                          .245
COMPSTAT    -1.0114771        1.1736344          .74275648        -.0357657
                                                      .389           -.16796
(CONSTANT)  -19.915362        4.8659296         16.751153
                                                      .000


F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B             STD ERROR B           T                95.0 PCT CONFIDENCE INTERVAL

ETHMOM2       2.9243435         1.6971456        1.7230953           -.41439587     ,  6.2630830
EMPLYMOH      1.2114454          .74060790       1.6357446           -.24552849     ,  2.6684193
NJOBMOM       -.15886474         .30432558       -.52202218          -.75755454     ,   .43982513
OCCMOM         .54344383E-02     .17692796E-01    .30715373          -.29372055E-01,   .40240872E-01
EDUCMOM       -.32874933         .21435325      -1.5336788           -.75043922     ,   .92941164E-01
AGEMOM         .75555509E-01     .92022284E-01    .82105123          -.10547744     ,   .25658746
EINCMOM2       .36344351E-03     .22065890E-03   1.6470830           -.70651579E-04,   .79753861E-03
WKUNMOM        .22250383         .34417083E-01   6.4668136            .15279622     ,   .28821144
EMPLYWOM      1.9765989         1.0108475        1.9553778           -.12018663E-01,  3.9651965
EDUCWOM        .25783676         .21595252       1.1939512           -.16699962     ,   .68267313
OCCWOM        -.20605901E-02     .23636288E-01   -.87179090E-01      -.48559493E-01,   .44438312E-01
NJOBWOM        .53006227         .57332923        .92453383          -.59782971     ,  1.6579542
EINCWOM2       .99487006E-03     .41476442E-03   2.3986533            .17892347E-03,   .18108286E-02
ETHWOM2       -.93511953        1.7054855        -.54830108         -4.2902658      ,  2.4200267
AGEWOM         .23413824E-01     .10466455        .22370349          -.18248934     ,   .22931699
WKUNWOM        .31675782         .38259614E-01   8.2791694            .24149093     ,   .39202472
PFAMSIZE      -.60392156         .25889481      -2.3326981          -1.1132353      ,  -.94607772E-01
FUNEWRAT       .58616671         .19812494       2.9585710            .19640195     ,   .97593147
TIMEOUT        .21403343         .56902078E-01   3.7614344            .10209182     ,   .32597504
COMPSTAT     -1.0114771         1.1736344        -.86183321         -3.3203299      ,  1.2973757
CONSTANT     -19.915362         4.8659296       -4.0928176         -29.487947       , -10.342777
```

Table III-J8

```
DEPENDENT VARIABLE..    AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY

                                          S U M M A R Y   T A B L E
STEP        VARIABLE                     F TO      SIGNIFICANCE  MULTIPLE R   R SQUARE   R SQUARE   SIMPLE R          OVERALL F    SIGNIFICANCE
      ENTERED    REMOVED           ENTER OR REMOVE                                       CHANGE

  1   ETHMOH2                         2.92534         .088         .01751      .00031     .00031     .01751          10.06289         .000
      EMPLYMOH                         .12833         .720         .14774      .02183     .02152    -.14591
      NJOBMOH                         2.25766         .134         .20768      .04313     .02130    -.14376
      OCCMOH                          3.30807         .070         .24979      .06239     .01926    -.13670
      EDUCMOH                         5.08973         .025         .28028      .07856     .01616    -.14989
      AGEMOH                           .13577         .713         .29335      .08606     .00750     .11453
      EINCMOH2                       10.33159         .001         .29967      .08980     .00375    -.11930
      WKUNMOH                        42.91993         .000         .43859      .19236     .10256     .35510
  2   EMPLYWOH                        2.53034         .113         .47862      .22908     .03672    -.23242          14.77840         .000
      EDUCWOH                         3.31054         .070         .48692      .23709     .00802     .02396
      OCCWOH                           .07400         .786         .50698      .25703     .01994    -.25189
      NJOBWOH                         1.51483         .219         .51374      .26393     .00690    -.24046
      EINCWOH2                        7.16162         .008         .54221      .29400     .03006    -.30982
      ETHWOH2                          .51267         .474         .54293      .29477     .00077     .00631
      AGEWOH                           .03910         .843         .54295      .29479     .00002     .06038
      WKUNWOH                        69.46829         .000         .64609      .41743     .12264     .48070
  3   PFAMSIZE                        4.22974         .041         .65178      .42482     .00739    -.07685          14.29402         .000
  4   FUNEMRAT                       13.85360         .000         .66943      .44813     .02331     .21189          14.79697         .000
  5   TIMEOUT                        13.57490         .000         .68566      .47013     .02200     .22212          15.27008         .000
  6   COMPSTAT                         .74276         .389         .68654      .47133     .00120    -.02128          14.53231         .000
```

Table III-J9

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Weeks Employed for One-Adult Completer Families with One or More Jobs in Year Pre-Center, Female HOH Age 23 or Older Living in a State with Unemployment Rate Less Than 6%

```
DEPENDENT VARIABLE..     AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY

MEAN RESPONSE            2.25806       STD. DEV.        9.82292

FINAL STEP.

MULTIPLE R               .75439        ANALYSIS OF VARIANCE     DF       SUM OF SQUARES         MEAN SQUARE              F      SIGNIFICANCE
R SQUARE                 .56910        REGRESSION               12.          3349.66204           279.13850        5.39300           .000
ADJUSTED R SQUARE        .46358        RESIDUAL                 49.          2536.20893            51.75937
STD DEVIATION           7.19446        COFFF OF VARIABILITY   318.6 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------          ---------- VARIABLES NOT IN THE EQUATION -----------

VARIABLE              B             STD ERROR B          F              BETA           VARIABLE      PARTIAL    TOLERANCE        F
                                                   -------------   -----------                                              ------------
                                                   SIGNIFICANCE    ELASTICITY                                               SIGNIFICANCE

ETHWOM2        .27103489        3.9711625        .46444281E-02      .0075632         XXC02         -.23473      .04947       2.7969990
                                                          .946       .11019                                                          .101
WKUNWOM        .61419441        .11472347        28.662042          .9657548         XXC06          .14583      .00605       1.0430327
                                                          .000      4.00542                                                          .312
OCCWOM         .35719043E-02    .68196836E-01    .27433518E-02      .0057297         XXC07         -.21784      .07285       2.3913935
                                                          .958       .04973                                                          .129
AGEWOM         .10742383        .18352865        .34260500          .0564143         XXC11         -.03844      .17031       .71049420E-01
                                                          .551      1.47171                                                          .791
NJOBWOM        .30514519        1.5746171        .59827248E-01      .0315191         XXC13         -.10623      .12669       .54787300
                                                          .808       .32462                                                          .463
EDUCWOM        1.1752626        .73562957        2.5524168          .1807232         XXC15         -.08576      .11579       .35569644
                                                          .117      5.86471                                                          .554
EMPLYWOM       4.6664341        2.5429034        3.3675310          .2374651         XXC17         -.20471      .13524       2.0909916
                                                          .073      1.16661                                                          .154
EINCWOM2       .15806676E-02    .85545359E-03    3.4141941          .2864080         XXC19         -.20491      .15114       2.1030856
                                                          .071      2.13383                                                          .153
FAMSIZE       -.16173084        1.0514342        .93614053E-02     -.0124300
                                                          .923      -.14676
FUNEMRAT       3.3148967        1.5889555        4.3522771          .2447245
                                                          .042      7.05126
TIMEOUT        .81121121E-01    .19609962        .17112536          .0485967
                                                          .681       .34245
COMPSTAT       4.0727573        2.5905735        2.4716460          .1747720
                                                          .122      1.39637
(CONSTANT)   -51.461547         15.807582        10.598265
                                                          .002

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.
```

Table III-J9

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DEPENDENT VARIABLE..     AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B            STD ERROR B          T                 95.0 PCT CONFIDENCE INTERVAL

ETHWOH2      .27063489         3.9711625       .68150041E-01         -7.7097155       ,   8.2509847
WKUNWOH      .61419441         .11472347       5.3536943              .38364895       ,   .84473986
OCCWOH       .35719043E-02     .68196036E-01   .52377008E-01         -.13347316       ,   .14061697
AGEWOH       .10742385         .18352845       .58532470             -.26139078       ,   .47623847
NJOBWOH      .38514519         1.5746171       .24459609             -2.7791664       ,   3.5494568
EDUCWOH      1.1752626         .73562957       1.5976283             -.30304039       ,   2.6535655
EMPLYWOH     4.6664341         2.5429054       1.8350834             -.44371547       ,   9.7765838
EINCWOH2     .15806676E-02     .85545359E-03   1.8477538             -.13843073E-03,      .32997660E-02
PFAMSIZE    -.10173084         1.0514342      -.96754356E-01         -2.2146671       ,   2.0112054
FUNEMRAT     3.3148967         1.5889555       2.0862112              .12177107       ,   6.5080223
TIMEOUT      .81121121E-01     .19609962       .41367301             -.31255583       ,   .47519807
COMPSTAT     4.0727573         2.5905735       1.5721450             -1.1331951       ,   9.2787097
CONSTANT    -51.461547         15.807582      -3.2554977             -83.228072       ,  -19.695021
```

Table III-J9

DEPENDENT VARIABLE.. ΔGFAMWKS CHANGE IN WEEKS EMPLOYED FOR FAMILY

SUMMARY TABLE

STEP	VARIABLE ENTERED	VARIABLE REMOVED	F TO ENTER OR REMOVE	SIGNIFICANCE	MULTIPLE R	R SQUARE	R SQUARE CHANGE	SIMPLE R	OVERALL F	SIGNIFICANCE
1	ETHWOH2		.02076	.866	.09904	.00981	.00981	.09904	6.82199	.000
	WKUNWOH		30.79070	.000	.62207	.38697	.37716	.61474		
	OCCWOH		.00004	.995	.63338	.40117	.01420	.17159		
	AGEWOH		.77689	.382	.63483	.40301	.00184	.03381		
	NJOBWOH		.25057	.619	.63677	.40547	.00247	-.25006		
	EDUCWOH		3.33049	.074	.66060	.43639	.03092	.07082		
	EMPLYWOH		7.04732	.010	.70095	.49133	.05494	-.15703		
	EINCWOH2		1.72070	.195	.71227	.50732	.01600	-.36395		
2	PFAMSIZE		.07687	.783	.71278	.50805	.00073	.11801	5.96691	.000
3	FUNEMRAT		3.80403	.057	.73634	.54220	.03415	.36326	6.04020	.000
4	TIMEOUT		.57092	.453	.73984	.54737	.00517	.27302	5.49600	.000
5	COMPSTAT		2.47164	.122	.75439	.56910	.02174	.04202	5.39300	.000

Table III-J10

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Weeks Employed for One-Adult Completer Families with One or More Jobs in Year Pre-Center, Female HOH Age 23 or Older Living in a State with Unemployment Rate Greater Than 6%

```
DEPENDENT VARIABLE..   AGFAHWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY

MEAN RESPONSE        6.97619     STD. DEV.      11.13003

FINAL STEP.

MULTIPLE R               .87746       ANALYSIS OF VARIANCE     DF       SUM OF SQUARES         MEAN SQUARE              F        SIGNIFICANCE
R SQUARE                 .76994       REGRESSION               12.          3910.48374          325.87365          6.08763            .000
ADJUSTED R SQUARE        .67474       RESIDUAL                 29.          1168.49245           40.29284
STD DEVIATION           6.34766       COEFF OF VARIABILITY     91.0 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------         ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE            B              STD ERROR B          F             BETA          VARIABLE       PARTIAL     TOLERANCE          F
                                                   ------------   ----------                                                ------------
                                                   SIGNIFICANCE   ELASTICITY                                                SIGNIFICANCE

ETHWOH2       4.5651077        7.5455074          .36603714      .0632893         XXC02          1.00000            0             0
                                                       .550        .63880                                                   1.000
EDUCWOH       2.8593961        1.0257115          7.7713809      .3115254         XXC06           .09159        .00354     .23688014
                                                       .009       4.68433                                                    .630
AGEWOH         .11937769        .16539118         .52097545      .0786175         XXC07          -.08221        .07061     .19052806
                                                       .476        .56592                                                    .666
OCCWOH         .17572177        .99102709E-01     3.1439823      .2638126         XXC11          -.08910        .13038     .21963186
                                                       .087        .94818                                                    .643
EMPLYWOH     -1.2228030        3.1588780          .14984673     -.0539996         XXC13           .04476        .09632     .56200774E-01
                                                       .702       -.10851                                                    .814
NJOBWOH      -2.4939718        1.9497852          1.6321655     -.1303354         XXC15           .09323        .07444     .24552619
                                                       .212       -.49309                                                    .624
EINCWOH2       .80440731E-03    .10343329E-02     .69841926      .1276395         XXC17           .09159        .05567     .23688014
                                                       .410        .35455                                                    .630
WKUNWOH        .54768434        .12330517         19.709495      .8528356         XXC19          -.04536        .00526     .57724526E-01
                                                       .000       1.67483                                                    .812
PFAMSIZE      2.4208548        1.4818974          2.0819823      .2356347
                                                       .095       1.13194
FUNEMRAT      -.72441422       1.0069258          .51758178     -.0754418
                                                       .478       -.79043
TIMEOUT        .77427312E-01    .18233683         .18031826      .0419171
                                                       .674        .12526
COMPSTAT     -2.7080469        4.3137482          .39409493     -.0797496
                                                       .535       -.34197
(CONSTANT)  -51.552735        16.259475          10.052877
                                                       .004

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.
```

Table III-J10

```
DEPENDENT VARIABLE..    AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B           STD ERROR B           T             95.0 PCT CONFIDENCE INTERVAL

ETHWOM2      4.5651977         7.5455074      .60501004          -10.867188      ,  19.997403
EDUCWOM      2.8593961         1.0257115      2.7877197           .76158052      ,  4.9572116
AGEWOM       .11937769         .16539118      .72178629          -.21868586      ,  .45744004
OCCWOM       .17572177         .99102709E-01  1.7731278          -.26956027E-01  ,  .37840957
EMPLYWOM    -1.2228036         3.1588780     -.38710042          -7.6834348      ,  5.2378288
NJOBWOM     -2.4909718         1.9497862     -1.2775621          -6.4767303      ,  1.4947868
EINCWOM2     .86449731E-03     .10343329E-02  .83571482          -.12519410E-02  ,  .29798556E-02
WKUNWOM      .54768434         .12336517      4.4395377           .29537423      ,  .79999445
PFAMSIZE     2.4208548         1.4018974      1.7268417          -.44634722      ,  5.2880569
FUNEMRAT    -.72441422         1.0069258     -.71943157          -2.7838088      ,  1.3349803
TIMEOUT      .77427312E-01     .18233683      .42463890          -.29549338      ,  .45034801
COMPSTAT    -2.7080409         4.3137482     -.62776980          -11.530647      ,  6.1145649
CONSTANT    -51.552735         16.259475     -3.1706272          -84.807097      , -18.298374
```

Table III-J10

```
DEPENDENT VARIABLE..    AGFAMWKS   CHANGE IN WEEKS EMPLOYED FOR FAMILY

                                             S U M M A R Y   T A B L E
STEP        VARIABLE                    F TO      SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R        OVERALL F   SIGNIFICANCE
      ENTERED    REMOVED         ENTER OR REMOVE                                      CHANGE

  1   ETHWOM2                           .08960        .767         .08555    .00732    .00732   -.08565         10.89112        .000
      EDUCWOM                          4.44564        .043         .09215    .00849    .00117    .04053
      AGEWOM                            .31295        .580         .10390    .01080    .00230   -.06187
      OCCWOM                           2.42452        .127         .36163    .13078    .11998    .35470
      EMPLYWOM                          .13619        .714         .65070    .42340    .29263   -.52394
      NJOBWOM                           .80789        .375         .65230    .42550    .00210   -.09264
      FINCWOM2                         1.29852        .264         .70817    .50150    .07600   -.47668
      WKUNWOM                         26.89439        .000         .85164    .72530    .22380    .78777
  2   PFAMSIZE                         4.94949        .033         .87298    .76209    .03680    .04069         11.38957        .000
  3   FUNEMWAT                          .51213        .480         .87519    .76596    .00387    .19948         10.14555        .000
  4   TIMEOUT                           .10934        .743         .87568    .76681    .00085    .01101          8.96817        .000
  5   COMPSTAT                          .39409        .595         .87746    .76994    .00313   -.34846          8.08763        .000
```

Table III-J11

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Occupational Status for Two-Adult Completer Families

```
DEPENDENT VARIABLE..     GFAMOCC2   GAIN IN OCC STATUS, 2-ADULT FAMILY

MEAN RESPONSE         15.37604       STD. DEV.       20.44739

FINAL STEP.

MULTIPLE R                .63676          ANALYSIS OF VARIANCE      DF       SUM OF SQUARES         MEAN SQUARE              F      SIGNIFICANCE
R SQUARE                  .40547          REGRESSION                20.          60689.41871         3034.47094         11.52562            .000
ADJUSTED R SQUARE         .37029          RESIDUAL                 338.          88988.81527          263.28052
STD DEVIATION           16.22592          COEFF OF VARIABILITY     105.5 PCT


-------------------- VARIABLES IN THE EQUATION --------------------          ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE            B            STD ERROR B           F              BETA         VARIABLE      PARTIAL     TOLERANCE          F
                                                  -------------   ----------                                           ------------
                                                  SIGNIFICANCE    ELASTICITY                                           SIGNIFICANCE

ETHMOH        -3.6602071        4.5421883        .64935331       -.0615401       XXC01         -.00774      .02789     .20199315E-01
                                                      .421         -.20556                                                  .887
EMPLYMOH       2.9991507        1.9666881        2.3255497        .0730060       XXC02         -.00774      .02789     .20199315E-01
                                                      .128          .08693                                                  .887
NJOBMOH       .89147712E-01     .80056538        .12400146E-01    .0053236       XXC03          .05034      .03431     .85613306
                                                      .911          .01242                                                  .355
OCCMOH        -.39713638       .47216673E-01     70.743833       -.3883105       XXC04          .01300      .03543     .57003164E-01
                                                      .000         -.59520                                                  .811
EDUCMOH        1.5489571        .56700073        7.4629679        .1247636       XXC05         -.00027      .02106     .23986089E-04
                                                      .007         1.06210                                                  .996
AGEMOH         .31399555        .24370698        1.6600113        .1157677       XXC06          .03906      .00829     .51495057
                                                      .198          .55615                                                  .474
EINCMOH       .11527489E-02    .58200190E-03     3.9230208        .1287020       XXC07          .00533      .04378     .95807632E-02
                                                      .048          .34050                                                  .922
WKUNMOH       .61398709E-01    .89923860E-01     .46619606        .0476557       XXC08         -.01645      .04469     .91222839E-01
                                                      .495          .06201                                                  .763
EMPLYWOH       .19886477        2.6482775        .56388268E-02    .0042366       XXC09         -.03647      .04880     .44875231
                                                      .940          .00328                                                  .503
EDUCWOH        1.0447206        .5704745         3.3537279        .0859402       XXC10         -.09083      .03432     2.8031179
                                                      .068          .74607                                                  .095
OCCWOH        -.41567957       .62214775E-01     44.640627       -.4020708       XXC11          .06789      .04236     1.5605182
                                                      .000         -.46154                                                  .212
NJOBWOH       -.47727975        1.5070707        .10029488       -.0196200       XXC12          .04680      .04053     .73979801
                                                      .752         -.02335                                                  .390
EINCWOH       .36398701E-02    .10963042E-02     11.023249        .2762682       XXC13         -.03738      .03774     .47158968
                                                      .001          .24196                                                  .493
ETHWOH         1.5740376        4.5626958        .11901103        .0264647       XXC14          .03769      .04342     .47945392
                                                      .730          .08840                                                  .489
AGEWOH        -.39629742        .27842593        2.0259239       -.1221191       XXC15         -.04520      .08213     .69001839
                                                      .156         -.62790                                                  .407
WKUNWOH        .21957280        .10144059        4.6852583        .1964116       XXC16          .00048      .07867     .76537544E-04
                                                      .031          .55450                                                  .993
PFAMSIZE       .29023171        .68907887        .17739928        .0230484       XXC17          .00736      .05711     .18263575E-01
                                                       74             571                                                      3
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Table III-J11

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REGRESSIONS ON GAIN IN FAMILY OCC STATUS
TWO-ADULT FAMILIES
FUNEMRAT     1.2180748       .52507317       5.3815612       .1025703        XXC18          .03333      .03985     .37483604
                                              .021            .45060                                                     .541
TIMEOUT      .18065682       .15195926       1.4133653       .0522320        XXC19          .07719      .09312     2.0198291
                                              .235            .12142                                                     .156
COMPSTAT     8.3444563       3.1394281       7.0647208       .1147861
                                              .008            .49583
(CONSTANT)   -30.511045      12.913568       5.5824093
                                              .019


F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B            STD ERROR B          T               95.0 PCT CONFIDENCE INTERVAL

ETHMOH      -3.6602071       4.5421883       -.80582461          -12.594725      ,  5.2743105
EMPLYMOH     2.9991507       1.9666881       1.5249753           -.86933909      ,  6.8676405
NJOBMOH      .89147712E-01   .80056538       .11135594           -1.4855703      ,  1.6638657
OCCMOH      -.39713638       .47216673E-01   -8.4109353          -.49001192      , -.30426084
EDUCMOH      1.5489571       .56700073       2.7318433            .43366256      ,  2.6642517
AGEMOH       .31399555       .24370698       1.2884143           -.16537786      ,  .79336896
EINCMOH      .11527489E-02   .58200190E-03   1.9806617            .79468731E-05,  .22975509E-02
WKUNMOH      .61398709E-01   .89923860E-01   .68278551           -.11548218      ,  .23827960
EMPLYWOH     .19886477       2.6482775       .75092122E-01       -5.0103164      ,  5.4080459
EDUCWOH      1.0447206       .57047451       1.8313186           -.77406942E-01,  2.1068481
OCCWOH      -.41567957       .62214775E-01   -6.6813642          -.53805649      , -.29330265
NJOBWOH     -.47727975       1.5070707       -.31669367          -3.4416989      ,  2.4871394
EINCWOH      .36398701E-02   .10963042E-02   3.3201279            .14834317E-02,  .57963084E-02
ETHWOH       1.5740376       4.5626958       .34497975           -7.4008184      ,  10.548894
AGEWOH      -.39529742       .27842593       -1.4233495          -.94396326      ,  .15136843
WKUNWOH      .21957280       .10144059       2.1645458            .20038415E-01,  .41910719
PFAMSIZE     .29023171       .68907887       .42118794           -1.0651915      ,  1.6456549
FUNEMRAT     1.2180748       .52507317       2.3198192            .18525206      ,  2.2508976
TIMEOUT      .18065682       .15195926       1.1888504           -.11824815      ,  .47956179
COMPSTAT     8.3444563       3.1394281       2.6579543            2.1691782      ,  14.519734
CONSTANT    -30.511045       12.913568       -2.3627123          -55.912128      , -5.1089627
```

Table III-J11

```
DEPENDENT VARIABLE..     OFAMOCC2    GAIN IN OCC STATUS, 2-ADULT FAMILY

                                       S U M M A R Y   T A B L E

STEP      VARIABLE                   F TO       SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R          OVERALL F   SIGNIFICANCE
      ENTERED    REMOVED        ENTER OR REMOVE                                      CHANGE

  1   ETHMOH                        1.51031          .220        .05228     .00273    .00273   -.05228           12.32735        .000
      EMPLYMOH                      1.56699          .211        .09017     .00813    .00540    .07186
      NJOBMOH                       1.87921          .171        .12018     .01444    .00631   -.08180
      OCCMOH                       84.21183          .000        .43675     .19075    .17630   -.41926
      EDUCMOH                       3.62948          .058        .44567     .19862    .00787    .05289
      AGEMOH                        1.46301          .227        .45052     .20297    .00435   -.04250
      EINCMOH                       6.73771          .010        .46660     .21772    .01475    .06884
      WKUNMOH                        .94621          .331        .46886     .21983    .00211    .00699
  2   EMPLYWOH                       .00017          .990        .48635     .23653    .01671   -.17004           13.04502        .000
      EDUCWOH                       3.55098          .060        .48945     .23956    .00303    .03156
      OCCWOH                       43.56136          .000        .59562     .35477    .11521   -.39192
      NJOBWOH                        .13547          .713        .59575     .35492    .00015   -.30254
      EINCWOH                      10.01583          .002        .60468     .36564    .01072   -.13744
      ETHWOH                         .01116          .916        .60499     .36602    .00038   -.01811
      AGEWOH                        2.75276          .098        .60915     .37106    .00504   -.11261
      WKUNWOH                       4.37055          .037        .61563     .37900    .00794    .27248
  3   PFAMSIZE                       .19871          .656        .61592     .37936    .00036   -.01569           12.26059          0
  4   FUNEMRAT                      5.36653          .021        .62370     .38900    .00964    .13743           12.02586        .000
  5   TIMEOUT                       2.25560          .134        .62693     .39304    .00404    .10671           11.55371          0
  6   COMPSTAT                      7.06472          .008        .63676     .40547    .01243    .08823           11.52562        .000
```

Table III-J12

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Gain in Occupational Status for One-Adult (Female HOH) Completer Families

```
DEPENDENT VARIABLE..     GFAMOCC1   GAIN IN OCC STATUS, 1-ADULT FAMILY

MEAN RESPONSE          20.07[illegible]      STD. DEV.       28.37375

FINAL STEP.

                                                                                                              F     SIGNIFICANCE
MULTIPLE R              .75139      ANALYSIS OF VARIANCE     DF      SUM OF SQUARES        MEAN SQUARE     11.66987          .000
R SQUARE                .56458      REGRESSION               12.       54543.47258         4545.28938
ADJUSTED R SQUARE       .51620      RESIDUAL                108.       42064.85799          389.48943
STD DEVIATION         19.73549      COEFF OF VARIABILITY     98.3 PCT


-------------------- VARIABLES IN THE EQUATION --------------------        --------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE           B             STD ERROR B        F               BETA          VARIABLE     PARTIAL     TOLERANCE        F
                                                ------------    ----------                                             ------------
                                                SIGNIFICANCE    ELASTICITY                                             SIGNIFICANCE

ETHWOM       -6.3227830        7.0542690       .80336428       -.0587136      XXC02        -.08656      .05345      .80775115
                                                .372            -.29154                                                  .371
NJOBWOM       2.0357702        2.2843697       .79419059       .0683005       XXC04        -.01608      .02469      .27665114E-01
                                                .375            .14080                                                   .868
AGEWOM        .23641770        .32575452       .52671913       .0590414       XXC06        .02948       .00749      .93044826E-01
                                                .470            .33122                                                   .761
EDUCWOM       4.2776115        1.4184918       9.0938758       .2076645       XXC07        .04919       .08378      .25953902
                                                .003            2.40913                                                  .611
OCCWOM       -1.0132888        .10674069       90.116947       -.7229529      XXC09        .03250       .15527      .11316998
                                                .000            -1.39791                                                 .737
EMP[illegible]WOM      4.6425726        5.0020694       .86142602       .0819237       XXC11        .10145       .15886      1.1126260
                                                .355            .10703                                                   .294
EINCWOM       .12336063E-02    .20167102E-02   .37416760       .0784610       XXC13        -.03849      .24411      .15872387
                                                .542            .13170                                                   .691
WKUNWOM       .27919867E-01    .19859778       .19764138E-01   .0196540       XXC15        -.04445      .21611      .21184729
                                                .888            .03633                                                   .646
PFAMSIZE      1.4252050        1.8734257       .57873757       .0620697       XXC17        -.05443      .1[illegible]109      .31797043
                                                .448            .22707                                                   .574
FUNEMRAT      3.6724145        1.2460159       8.6867277       .1991979       XXC18        .00330       .03735      .11674575E-02
                                                .004            1.08585                                                  .973
TIMEOUT       .82987857E-01    .33743699       .60484448E-01   .0179512       XXC19        .04956       .12196      .26342659
                                                .806            .04103                                                   .609
COMPSTAT      10.259176        4.5674155       5.0452642       .1567811
                                                .027            .38435
(CONSTANT)   -44.265238        21.807344       4.1202168
                                                .045

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.
```

Table III-J12

```
DEPENDENT VARIABLE..    GFAMOCC1   GAIN IN OCC STATUS, 1-ADULT FAMILY


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B             STD ERROR B          T             95.0 PCT CONFIDENCE INTERVAL

ETHWOM      -6.3227830        7.0542690       -.89630591        -20.305568     ,  7.6600021
NJOBWOM      2.0357702        2.2843697        .89117371        -2.4922468     ,  6.5637872
AGEWOM       .23641770        .32575452        .72575418        -.40928427     ,  .88211967
EDUCWOM      4.2776115        1.4184918        3.0156054         1.4659146     ,  7.0893083
OCCWOM      -1.0132888        .10674069       -9.4929947        -1.2248673     , -.80171020
EMPLYWOM     4.6425726        5.0020694        .92813039        -5.2723967     ,  14.557542
EINCWOM      .12336063E-02    .20167102E-02    .61169240        -.27638632E-02,  .52310759E-02
WKUNWOM      .27919867E-01    .19859778        .14058499        -.36573540     ,  .42157513
PFAMSIZE     1.4252050        1.8734257        .76074803        -2.2882499     ,  5.1386598
FUNEMRAT     3.6724145        1.2460159        2.9473255         1.2025948     ,  6.1422342
TIMEOUT      .82987857E-01    .33743699        .24593586        -.58587080     ,  .75184652
COMPSTAT     10.259176        4.5674155        2.2461606         1.2057659     ,  19.312586
CONSTANT    -44.265238        21.807344       -2.0298317        -87.491177     , -1.0392994
```

Table III-J12

DEPENDENT VARIABLE.. GFAMOCC1 GAIN IN OCC STATUS, 1-ADULT FAMILY

SUMMARY TABLE

STEP	VARIABLE ENTERED	REMOVED	F TO ENTER OR REMOVE	SIGNIFICANCE	MULTIPLE R	R SQUARE	R SQUARE CHANGE	SIMPLE R	OVERALL F	SIGNIFICANCE
1	ETHWOH		.70747	.402	.02712	.00074	.00074	-.02712	14.06515	.000
	NJOBWOH		.49975	.481	.12787	.01635	.01562	-.12449		
	AGEWOH		5.84959	.017	.15023	.02257	.00622	.08194		
	EDUCWOH		6.23164	.014	.23088	.05331	.03074	.15208		
	OCCWOH		97.83622	.000	.69980	.48971	.43641	-.64496		
	EMPLYWOH		1.77201	.186	.70783	.50102	.01130	-.05993		
	EINCWOH		.02903	.865	.70790	.50112	.00010	-.08989		
	WKUNWOH		.00874	.926	.70793	.50116	.00004	.06873		
2	PFAMSIZE		.22029	.640	.70862	.50215	.00099	.17474	12.43979	0
3	FUNEMRAT		9.57863	.002	.73623	.54203	.03988	.08864	13.01895	.000
4	TIMEOUT		.52967	.468	.73773	.54424	.00221	.08976	11.83295	0
5	COMPSTAT		5.04526	.027	.75139	.56458	.02034	.31444	11.66987	.000

Table III-J13

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Family Well-Being for Two-Adult Completer Families

```
DEPENDENT VARIABLE..     FAM2SCOH    FAM WELL-BEING, 2-ADULT

MEAN RESPONSE            .02041      STD. DEV.         .98777

FINAL STEP.

MULTIPLE R               .34258      ANALYSIS OF VARIANCE     DF     SUM OF SQUARES        MEAN SQUARE            F      SIGNIFICANCE
R SQUARE                 .11736      REGRESSION              20.          33.55173            1.67759     1.81504              .019
ADJUSTED R SQUARE        .05276      RESIDUAL               273.         252.32583             .92427
STD DEVIATION            .96139      COEFF OF VARIABILITY  4710.8 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------        ---------- VARIABLES NOT IN THE EQUATION -----------

VARIABLE            B           STD ERROR B        F             BETA         VARIABLE     PARTIAL     TOLERANCE         F
                                               -------------  ------------                                          -------------
                                               SIGNIFICANCE   ELASTICITY                                            SIGNIFICANCE

ETHMOM     -.26614397         .26501176        1.0085629     -.0874051        XXC01         .00977       .05279     .25966830E-01
                                                    .316     -11.48855                                                       .872
EMPLYMOM    .97193666E-02     .13197[illegible]9       .54232424E-02   .0049209        XXC02         .03310       .06977     .29828020
                                                    .941        .25108                                                       .585
NJOBMOM    -.25020522E-01     .52654534E-01     .22579857     -.0294485        XXC03         .01276       .03653     .44272580E-01
                                                    .636      -2.52290                                                       .834
OCCMOM     -.28802251E-04     .30588441E-02     .86662133E-04 -.0005667        XXC04         .05153       .04111     .72417299
                                                    .992       -.03530                                                       .396
AGEMOM     -.39117024E-02     .16893227E-01     .53617479E-01 -.0259443        XXC05         .09002       .02265    2.2223005
                                                    .817      -5.16866                                                       .137
EDUCMOM     .46640008E-01     .37411892E-01    1.5542216       .0826424        XXC06        -.02803       .01423     .21390560
                                                    .214      24.18326                                                       .644
EINCMOM     .10250694E-03     .34666485E-04    8.7438729       .2589825        XXC07         .06420       .06042    1.1256168
                                                    .003      24.68402                                                       .290
WKUNMOM     .10329053E-01     .63942316E-02    2.6094216       .1515576        XXC08         .09639       .08515    2.5507442
                                                    .107       6.65707                                                       .111
EMPLYWOM    .16887169         .19073796         .78386163      .0702699        XXC09         .05469       .09347     .81597493
                                                    .377       1.77315                                                       .367
EDUCWOM     .27005610E-01     .37374321E-01     .52210919      .0450404        XXC10        -.02065       .07662     .11606020
                                                    .471      14.45250                                                       .734
NJOBWOM    -.14559125         .10372000        1.9703590      -.1158197        XXC11        -.03457       .04658     .32543620
                                                    .162      -4.63465                                                       .569
EINCWOM    -.14795301E-04     .71314892E-04     .43041474E-01 -.0218932        XXC12         .03383       .08194     .31163910
                                                    .836       -.62757                                                       .577
OCCWOM      .50798739E-03     .46087631E-02     .12148904E-01  .0092094        XXC13         .05023       .09760     .68612411
                                                    .912        .35517                                                       .408
[illegible]WOM      .20077914E-01     .23972331         .76148222E-02  .0073310        XXC14         .07776       .06322    1.6547025
                                                    .933        .83323                                                       .199
AGEWOM      .26138618E-02     .20988790E-01     .17973421E-01  .0155803        XXC15         .01470       .11980     .58794771E-01
                                                    .893       3.32411                                                       .809
WKUNWOM    -.20350679E-02     .72358012E-02     .79103025E-01 -.0357311        XXC16         .00912       .12077     .22634392E-01
                                                    .779      -4.02133                                                       .881
PFAMSIZE    .16209935         .57367029E-01    3.1675335       .1420661        XXC17         .07885       .09545    1.7014871
```

Table III-J13

```
FAMILY AND PERSONAL REGRESSIONS
2-ADULT COMPLETER FAM AND PERS REGRESSIONS
FUNEMRAT      .61081686E-01   .38409792E-01    2.5289377          .0968094          XXC18          .09700        .04125      2.5835242
                                                    .113          18.73172                                                           .109
TIMEOUT       .14884613E-01   .92826255E-02    2.5711858          .0990917          XXC19         -.00475        .11078      .61470210E-02
                                                    .110          8.15677                                                            .938
COMPSTAT     -.44035413       .16080106        7.4993969         -.1607845
                                                    .007         -18.27470
(CONSTANT)   -1.5610349       .82279619        3.5994875
                                                    .059

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B              STD ERROR B          T                95.0 PCT CONFIDENCE INTERVAL

ETHMOH       -.26614397         .26501176       -1.0042723            -.78787040     ,  .25558245
EMPLYMOH      .97193066E-02     .13197929        .73642667E-01        -.25010721     ,  .26954582
NJOBMOH      -.25120522E-01     .52654534E-01   -.47718267            -.12868106     ,  .78640018E-01
OCCMOH       -.28802751E-04     .30568441E-02   -.94160572E-02        -.60507230E-02,   .59931185E-02
AGEMOH       -.39117024E-02     .16893227E-01   -.23155448            -.37169257E-01,   .29345852E-01
EDUCMOH       .46640808E-01     .37411892E-01    1.2466840            -.27011671E-01,   .12029329
EINCMOH       .10250894E-03     .34666485E-04    2.9570040             .34261317E-04,   .17075656E-03
WKUNMOH       .10329053E-01     .63942316E-02    1.6153704            -.22592176E-02,   .22917323E-01
EMPLYWOH      .16887169         .19073796        .88535961            -.20663254     ,  .54437591
EDUCWOH       .27005610E-01     .37374321E-01    .72257124            -.46572904E-01,   .10058412
NJOBWOH      -.14559125         .10372000       -1.4036951            -.34978394     ,  .58601442E-01
EINCWOH      -.14795501E-04     .71314892E-04   -.20746439            -.15519233E-03,   .12560173E-03
OCCWOH        .50798739E-03     .46087631E-02    .11022206            -.85652460E-02,   .95812208E-02
ETHWOH        .20077914E-01     .23972331        .83754536E-01        -.45186336     ,  .49201919
AGEWOH        .28138618E-02     .20988790E-01    .13406499            -.38506593E-01,   .44134317E-01
WKUNWOH      -.20350879E-02     .72358012E-02   -.28125260            -.16280149E-01,   .12209973E-01
PFAMSIZE      .10209935         .57367079E-01    1.7797566            -.10838642E-01,   .21503734
FUNEMRAT      .61081686E-01     .38409792E-01    1.5902634            -.14535349E-01,   .13669872
TIMEOUT       .14884613E-01     .92826255E-02    1.6034917            -.33900138E-02,   .33159240E-01
COMPSTAT     -.44035413         .16080106       -2.7385027            -.75692183     , -.12378643
CONSTANT     -1.5610349         .82279619       -1.8972315            -3.1808669     ,  .58797104E-01
```

Table III-J13

DEPENDENT VARIABLE.. FAM2SCOR FAM WELL-BEING, 2-ADULT

SUMMARY TABLE

STEP	VARIABLE ENTERED	REMOVED	F TO ENTER OR REMOVE	SIGNIFICANCE	MULTIPLE R	R SQUARE	R SQUARE CHANGE	SIMPLE R	OVERALL F	SIGNIFICANCE
1	ETHMOH		3.44819	.064	.05630	.00317	.00317	-.03630	2,09446	.036
	EMPLYMOH		.02702	.870	.06195	.00384	.00067	.02651		
	NJOBMOH		.90595	.342	.10514	.01105	.00722	-.08722		
	OCCMOH		.44372	.506	.10604	.01124	.00019	-.00659		
	AGEMOH		2.12649	.146	.13034	.01699	.00574	.08344		
	EDUCMOH		2.51774	.114	.17745	.03149	.01450	.10366		
	EINCMOH		7.14188	.008	.21687	.04703	.01554	.10921		
	WKUNMOH		2.56384	.110	.23564	.05553	.00850	.00693		
2	EMPLYWOH		.23365	.629	.23574	.05557	.00005	-.00240	1,28045	.209
	EDUCWOH		.10735	.743	.23839	.05683	.00126	.03454		
	NJOBWOH		1.74811	.187	.25355	.06429	.00746	-.10508		
	EINCWOH		.08405	.772	.25393	.06448	.00019	-.05256		
	OCCWOH		.21297	.645	.25550	.06528	.00080	-.02655		
	ETHWOH		.35204	.553	.25641	.06575	.00047	-.03910		
	AGEWOH		.92783	.336	.26242	.06886	.00312	.09688		
	WKUNWOH		.00090	.976	.26243	.06887	.00000	.04105		
3	PFAMSIZE		3.49358	.063	.28374	.08051	.01164	.13570	1,42148	.125
4	FUNFMRAT		2.04551	.154	.29546	.08730	.00679	.10384	1,46123	.103
5	TIMEOUT		1.75920	.186	.30515	.09312	.00582	.10398	1,48074	.091
6	COMPSTAT		7.49940	.007	.34258	.11736	.02425	-.12533	1,81504	.019

Table III-J14

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Family Well-Being for One-Adult (Female HOH) Completer Families with HOH Pre-Center Occupational Status Score of 15 or Higher, HOH Age 23 or Older, Unemployed Less Than 48 Weeks in Year Pre-Center

```
DEPENDENT VARIABLE..    FAMISCOR   FAM WELL-BEING, 1-ADULT

MEAN RESPONSE          .10145      STD. DEV.       1.10007

FINAL STEP.

MULTIPLE R              .55321         ANALYSIS OF VARIANCE      DF       SUM OF SQUARES          MEAN SQUARE              F        SIGNIFICANCE
R SQUARE                .30604         REGRESSION                12.           25.18368             2.09864           2.05799            .035
ADJUSTED R SQUARE       .15733         RESIDUAL                  56.           57.10618             1.01975
STD DEVIATION          1.00983         COFFF OF VARIABILITY    995.4 PCT

-------------------- VARIABLES IN THE EQUATION ---------------------           ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE              B              STD ERROR B           F              BETA               VARIABLE        PARTIAL      TOLERANCE          F
                                                     -------------    ----------                                                     -----------
                                                     SIGNIFICANCE     ELASTICITY                                                     SIGNIFICANCE

ETHWOH2      -.39962471E-03     .43087721        .86019637E-06    -.0001172
                                                          .999        -.00349
HJOBWOH       .22190744         .17073916        1.6891859         .1618369
                                                          .199        3.77243
EINCWOH2      .13473242E-03     .12761358E-03    1.1146805         .2032487
                                                          .296        4.05179
EDUCWOH      -.20247512         .11132323        3.3080477        -.2263182
                                                          .074      -23.11109
AGEWOH        .88366712E-02     .24747022E-01     .12750626        .0499690
                                                          .722        2.63585
OCCWOH        .13583561E-01     .96363039E-02    1.9870386         .1893061
                                                          .164        4.82993
EMPLYWOH      .58645957         .36992263        2.5133581         .2581290
                                                          .119        3.68632
WKUNWOH       .33555242E-01     .15535474E-01    4.6652157         .4801729
                                                          .035        5.37363
PFAMSIZE     -.56028831E-01     .13670670         .16797458       -.0545286
                                                          .683       -1.67286
FUNEMRAT      .19534423         .94942396E-01    4.2333171         .2733728
                                                          .044       11.67600
TIMEOUT      -.95191956E-02     .22440175E-01     .17994842       -.0547793
                                                          .673        -.94920
COMPSTAT     -.35762501         .37670623         .90126013       -.1280548
                                                          .347       -2.86100
(CONSTANT)   -.65214793        1.6684409          .15278144
                                                          .497

ALL VARIABLES ARE IN THE EQUATION.
```

Table III-J14

```
DEPENDENT VARIABLE..    FAMISCOR   FAM WELL-BEING, 1-ADULT


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE          B           STD ERROR B          T             95.0 PCT CONFIDENCE INTERVAL

ETHWOM2    -.39962471E-03   .43087721     -.92746772E-03       -.86355041     ,  .86275116
NJOBWOM     .22190744       .17073916      1.2996868           -.12012420     ,  .56393909
EINCWOM2    .13473242E-03   .12761358E-03  1.0557843           -.12090831E-03,  .39037314E-03
EDUCWOM    -.20247512       .11132323     -1.8188039           -.42549235     ,  .20532103E-01
AGEWOM      .88366712E-02   .24747022E-01  .35708019           -.40737570E-01,  .58410913E-01
OCCWOM      .13583561E-01   .96363039E-02  1.4096236           -.57202755E-02,  .32887397E-01
EMPLYWOM    .58645957       .36992263      1.5853574           -.15458450     ,  1.3275036
WKUNWOM     .33555242E-01   .15535474E-01  2.1599110            .24339475E-02,  .64676537E-01
PFAMSIZE   -.56028831E-01   .13670670     -.40984702           -.32988525     ,  .21782759
FUNEMRAT    .19534423       .94942396E-01  2.0575026            .51517551E-02,  .38553671
TIMEOUT    -.95191956E-02   .22440175E-01 -.42420328           -.54472267E-01,  .35433876E-01
COMPSTAT   -.35762501       .37670623     -.94934721           -1.1122583     ,  .39700825
CONSTANT   -.65214793       1.6684409     -.39087267           -3.9944366     ,  2.6901408
```

Table III-J14

```
DEPENDENT VARIABLE..    FAMISCOR   FAM WELL-BEING, 1-ADULT

                                                    S U M M A R Y   T A B L E

STEP        VARIABLE                  F TO       SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R          OVERALL F   SIGNIFICANCE
      ENTERED    REMOVED         ENTER OR REMOVE                                     CHANGE

  1   ETHWOM2                          .04835       .827         .04926     .00243    .00243   -.04926           2.38798       .026
      NJOBWOM                         1.02096       .316         .05707     .00326    .00083    .03212
      EINCWOM2                        2.01781       .161         .05931     .00352    .00026   -.01972
      EDUCWOM                         2.71243       .105         .20025     .04010    .03658   -.19632
      AGEWOM                           .29028       .592         .22498     .05062    .01052    .12287
      OCCWOM                          2.44265       .123         .39074     .15268    .10206    .37911
      EMPLYWOM                        4.00459       .050         .40084     .16067    .00799    .12524
      WKUNWOM                         6.39428       .014         .49143     .24150    .08083    .18027
  2   PFAMSIZE                         .47355       .494         .49754     .24754    .00604    .07239           2.15664       .038
  3   FUNEMRAT                        3.49693       .067         .53882     .29032    .04278    .28529           2.37272       .020
  4   TIMEOUT                          .36744       .547         .54302     .29487    .00455    .00251           2.16690       .029
  5   COMPSTAT                         .90126       .347         .55321     .30604    .01117   -.02312           2.05799       .035
```

Table III-J15

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Personal Well-Being for Two-Adult Completer Families

```
DEPENDENT VARIABLE..    PER2FAM    FAM PERS WELL-BEING, 2-ADULT FAM

MEAN RESPONSE           .27616     STD. DEV.        1.59149

FINAL STEP.

MULTIPLE R              .30997     ANALYSIS OF VARIANCE    DF       SUM OF SQUARES        MEAN SQUARE               F      SIGNIFICANCE
R SQUARE                .09608     REGRESSION              20.           83.47093            4.17355         1.71663              .030
ADJUSTED R SQUARE       .04011     RESIDUAL               323.          785.29361            2.43125
STD DEVIATION          1.55925     COEFF OF VARIABILITY   564.6 PCT


-------------------- VARIABLES IN THE EQUATION ---------------------          ---------- VARIABLES NOT IN THE EQUATION ----------

VARIABLE          B              STD ERROR B        F              BETA            VARIABLE     PARTIAL     TOLERANCE         F
                                                  ------------   -----------                                              ------------
                                                  SIGNIFICANCE   ELASTICITY                                               SIGNIFICANCE

ETHMOH      -.30547082         .36903294         .68518712      -.0635707        XXC01       -.03202       .04729       .33040225
                                                      .408       -.96786                                                      .566
EMPLYMOH     .16677668         .18950085         .77454797       .0524727        XXC02        .02749       .06414       .24358566
                                                      .379        .30195                                                      .622
NJOBMOH     -.13194696         .77684488E-01    2.8848959       -.0982957        XXC03       -.01501       .03991       .72599172E-01
                                                      .090      -1.02780                                                      .788
OCCMOH       .52528164E-02     .45666009E-02    1.3231173        .0639755        XXC04       -.00288       .04058       .26643391E-02
                                                      .251        .46601                                                      .959
AGEMOH       .14203575E-01     .25146958E-01     .31775994       .0588941        XXC05       -.00003       .02154       .20282572E-06
                                                      .573       1.35442                                                     1.000
EDUCMOH      .79953222E-01     .56127801E-01    2.0291581        .0846613        XXC06        .07071       .01359      1.6180953
                                                      .155       3.09377                                                      .204
EINCMOH      .70284692E-04     .52502340E-04    1.7921080        .1083546        XXC07       -.00988       .06654       .31434155E-01
                                                      .182       1.22329                                                      .859
WKUNMOH      .73853640E-02     .92791324E-02     .63347440       .0671854        XXC08       -.01923       .08469       .11908098
                                                      .427        .36670                                                      .730
EMPLYWOH     .22000617         .26943695         .66673829       .0577040        XXC09       -.04349       .07820       .62009290
                                                      .415        .17832                                                      .435
EDUCWOH      .96004236E-01     .53125686E-01    3.2658015        .1036206        XXC10        .03284       .06810       .34755744
                                                      .072       3.79780                                                      .556
NJOBWOH      .92019361E-01     .14791361         .38702780       .0474447        XXC11        .03491       .04842       .39292449
                                                      .534        .23150                                                      .531
EINCWOH      .14674184E-03     .10650064E-03    1.8984687        .1373521        XXC12       -.05860       .07902      1.1093711
                                                      .169        .49211                                                      .293
OCCWOH      -.17503734E-02     .61619830E-02     .80690126E-01  -.0210998        XXC13       -.04189       .07698       .56612564
                                                      .777       -.09774                                                      .452
ETHWOH       .51860898         .35228881        2.1671171        .1150187        XXC14       -.01666       .06059       .89405621E-01
                                                      .142       1.60496                                                      .765
AGEWOH       .10709364E-02     .29987779E-01     .12753774E-02   .0038193        XXC15       -.03174       .10299       .32474323
                                                      .972        .09156                                                      .569
WKUNWOH      .86485446E-02     .10554237E-01     .67147887       .0957667        XXC16        .05959       .11911      1.1476729
                                                      .413       1.23975                                                      .285
PFAMSIZE    -.71671734E-02     .76761530E-01     .87178336E-02  -.0066973        XXC17       -.00883       .08142       .25083393E-01
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Table III-J15

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2-ADULT FAMILY REGRESSIONS, PERSONAL DOMAIN
PERSONAL REGRESSIONS FOR TWO-ADULT FAMILES
FUNEMRAT     -.64120486E-01   .56126295E-01   1.3051513          -.0441780               XXC18            -.03309          .03948          .35296623
                                                   .254          -1.44589                                                                        .551
TIMEOUT      -.26263336E-01   .13825764E-01   3.6084565          -.1073361               XXC19             .01984          .10828          .12684012
                                                   .058          -1.03865                                                                        .722
COMPSTAT      .28812442       .24671164       1.3638947           .0633664
                                                   .244            .89470
(CONSTANT)   -2.6673612      1.2210625        4.7710624
                                                   .030


F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.



COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE           B            STD ERROR B         T              95.0 PCT CONFIDENCE INTERVAL

ETHMOH       -.30547082       .36903294       -.82776031         -1.0314825      ,  .42054083
EMPLYMOH      .14677668       .18950085        .88008407         -.20603509      ,  .53958845
NJOBMOH      -.13194696       .77684488E-01  -1.6984981          -.28477842      ,  .20884503E-01
OCCMOH        .52529164E-02   .45666009E-02   1.1502683          -.37312201E-02,    .14236853E-01
AGEMOH        .14203575E-01   .25196958E-01   .56370200          -.35367297E-01,    .63774448E-01
EDUCMOH       .79953222E-01   .56127801E-01   1.4244852          -.30469001E-01,    .19037544
EINCMOH       .70284602E-04   .52502340E-04   1.3386964          -.33005032E-04,    .17357442E-03
WKUNMOH       .73453640E-02   .92791324E-02   .79591105          -.10869804E-01,    .25640532E-01
EMPLYWOH      .22000617       .26943695        .81654044         -.31006475      ,  .75007908
EDUCWOH       .96006236E-01   .53125686E-01   1.8071529          -.85098188E-02,    .20052229
NJOBWOH       .92019361E-01   .14791361        .62211558         -.19897635      ,  .38301507
EINCWOH       .14674184E-03   .10650064E-03   1.3778493          -.62788672E-04,    .35026434E-03
OCCWOH       -.17503734E-02   .61619430E-02  -.28406008          -.13873062E-01,    .10372315E-01
ETHWOH        .51860898       .35228881       1.4721131          -.17444134      ,  1.2116793
AGEWOH        .10709364E-02   .29967779E-01   .35712427E-01      -.57925090E-01,    .60066962E-01
WKUNWOH       .84485446E-02   .10554237E-01   .81943814          -.12115182E-01,    .29412272E-01
PFAMSIZE     -.71671734E-02   .76761530E-01  -.93369340E-01      -.15818287      ,  .14384852
FUNEMRAT     -.64120486E-01   .56126295E-01  -1.1424322          -.17453975      ,  .46298773E-01
TIMEOUT      -.26263336E-01   .13825764E-01  -1.8995938          -.53463254E-01,    .93658294E-03
COMPSTAT      .28812442       .24671164       1.1678590          -.19724018      ,  .77348903
CONSTANT     -2.6673612      1.2210625       -2.1844593          -5.0696009      , -.26512156
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Table III-J15

DEPENDENT VARIABLE..   PERZFAM   FAM PERS WELL-BEING, 2-ADULT FAM

SUMMARY TABLE

STEP	VARIABLE ENTERED	VARIABLE REMOVED	F TO ENTER OR REMOVE	SIGNIFICANCE	MULTIPLE R	R SQUARE	R SQUARE CHANGE	SIMPLE R	OVERALL F	SIGNIFICANCE
1	ETHMOH		.57547	.449	.06568	.00431	.00431	.06568	1.89626	.060
	EMPLYMOH		1.56678	.212	.11457	.01313	.00881	.09329		
	NJOBMOH		2.82484	.094	.15774	.02488	.01176	-.10717		
	OCCMOH		2.38675	.123	.18470	.03411	.00923	.10656		
	AGEMOH		.26478	.607	.18532	.03434	.00023	.04920		
	EDUCMOH		1.55485	.213	.20031	.04012	.00578	.10634		
	EINCMOH		.98387	.322	.20699	.04284	.00272	.09633		
	WKUNMOH		.16742	.683	.20814	.04332	.00048	-.05095		
2	EMPLYWOH		1.34133	.248	.23608	.05574	.01241	.12611	1.76390	.035
	EDUCWOH		2.73201	.099	.25757	.06634	.01061	.14310		
	NJOBWOH		.47822	.490	.26105	.06814	.00180	.07813		
	EINCWOH		1.98985	.159	.26683	.07120	.00305	.12195		
	OCCWOH		.13641	.712	.26777	.07170	.00050	.08068		
	ETHWOH		1.82420	.178	.27805	.07731	.00561	.08723		
	AGEWOH		.02720	.869	.27819	.07739	.00008	.01744		
	WKUNWOH		.73263	.393	.28187	.07945	.00206	-.10642		
3	PFAMSIZE		.10737	.743	.28241	.07975	.00030	-.02220	1.66193	.048
4	FUNEMRAT		1.22039	.270	.28844	.08320	.00344	-.07360	1.63846	.049
5	TIMEOUT		3.23641	.073	.30375	.09226	.00907	-.08662	1.73324	.030
6	COMPSTAT		1.36389	.244	.30997	.09608	.00382	.06559	1.71663	.030

Table III-J16

Covaried Regression Coefficients, 95% Confidence Intervals, and Regression Summary Table from Analysis of Personal Well-Being for One-Adult Completer Families

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DEPENDENT VARIABLE..    PERISCOM   PER WELL-BEING, 1-ADULT

MEAN RESPONSE             .07519    STD. DEV.       1.09145

FINAL STEP.

MULTIPLE R                .29710        ANALYSIS OF VARIANCE    DF       SUM OF SQUARES          MEAN SQUARE              F        SIGNIFICANCE
R SQUARE                  .08827        REGRESSION              12.           13.88008              1.15667           .96814           .483
ADJUSTED R SQUARE       -.00290         RESIDUAL               120.          143.36804              1.19473
STD DEVIATION            1.09304        COEFF OF VARIABILITY  1453.7 PCT


-------------------- VARIABLES IN THE EQUATION --------------------              ---------- VARIABLES NOT IN THE EQUATION -----------

VARIABLE              B            STD ERROR B          F              BETA             VARIABLE      PARTIAL     TOLERANCE        F
                                                   ------------     ----------                                                ------------
                                                   SIGNIFICANCE     ELASTICITY                                                SIGNIFICANCE

ETHWOM        .28836435          .31488989          .83862091         .0838899          XXC02        -.14019       .04969       2.3856641
                                                        .362          3.40270                                                     .125
OCCWOM      -.36893575E-02      .53932844E-02       .46794502        -.0698347          XXC04         .02474       .02686       .72878343E-01
                                                        .495         -1.28832                                                     .788
AGEWOM      -.21494282E-01      .17302089E-01      1.5432945         -.1358298          XXC06         .02701       .00804       .86897085E-01
                                                        .217         -8.08830                                                     .769
EDUCWOM     -.14257253          .74883890E-01      3.6248908         -.1773077          XXC07        -.03044       .08249       .11036994
                                                        .059        -21.57172                                                     .740
WKUNWOM      .14896489E-01      .10761269E-01      1.9090975          .2708287          XXC09         .05090       .16845       .31009633
                                                        .170          5.53405                                                     .579
NJOBWOM      .99292633E-01      .12303021           .65134680         .0801408          XXC11        -.00508       .15443       .30690292E-02
                                                        .421          1.73762                                                     .956
EMPLYWOM     .32284334          .27485892          1.3796343          .1469324          XXC13         .03848       .26960       .17649954
                                                        .242          1.84021                                                     .675
EINCWOM      .11423732E-03      .10859445E-03      1.1066256          .1923244          XXC15        -.02946       .22264       .10336560
                                                        .295          3.02807                                                     .748
PFAMSIZE    -.33629983E-01      .90740135E-01       .13735815        -.0386879          XXC17        -.13142       .18189       2.0914149
                                                        .712         -1.43600                                                     .151
FUNEMWAT    -.15705794E-01      .66157605E-01       .56358609E-01    -.0219022          XXC18         .10304       .03525       1.2770373
                                                        .813         -1.24468                                                     .261
TIMEOUT     -.11922207E-01      .17319279E-01       .47386393        -.0676075          XXC19         .11188       .13928       1.5084919
                                                        .493         -1.59400                                                     .222
COMPSTAT     .21773657          .23301251           .87319709         .0873522
                                                        .352          2.15561
(CONSTANT)  1.3928022          1.1458679           1.4774397
                                                        .227

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION.
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Table III-J16

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DEPENDENT VARIABLE..    PERISCOR    PER WELL-BEING, T-ADULT


COEFFICIENTS AND CONFIDENCE INTERVALS.

VARIABLE            B             STD ERROR B          T                 95.0 PCT CONFIDENCE INTERVAL

ETHWOM        .28836435         .31488989         .91576248          -.33509573       ,  .91182443
OCCWOM      -.36493575E-02      .53932044E-02   -.67666507          -.14367685E-01,  .70689784E-02
AGEWOM      -.21494782E-01      .17302089E-01   -1.2422941          -.55751214E-01,  .12762650E-01
EDUCWOM     -.14257253          .74083898E-01   -1.9239146          -.29083742       ,  .56923613E-02
WKUNWOM      .14896489E-01      .10781269E-01    1.3817009          -.64496727E-02,  .36242651E-01
NJOBWOM      .99292833E-01      .12303871         .80706059          -.14429842       ,  .34288409
EMPLYWOM     .32284334          .27485892        1.1745784          -.22135828       ,  .86704488
EINCWOM      .11423732E-03      .10859445E-03    1.0519678          -.10077214E-03,  .32924677E-03
PFAMSIZE    -.33629583E-01      .90740135E-01   -.37061861          -.21392914       ,  .14662917
FUNEMRAT    -.15705794E-01      .66157605E-01   -.23739968          -.14669325       ,  .11528166
TIMEOUT     -.11922207E-01      .17319279E-01   -.68837775          -.46213174E-01,  .22368761E-01
COMPSTAT     .21773657          .23301251         .93445016          -.24360998       ,  .67908712
CONSTANT    1.3920622          1.1458679         1.2154998           -.87593654       ,  3.6615409
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Table III-J16

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DEPENDENT VARIABLE..    PERISCOR    PER WELL-BEING, I-ADULT

                                          S U M M A R Y   T A B L E
STEP        VARIABLE                  F TO       SIGNIFICANCE  MULTIPLE R  R SQUARE  R SQUARE  SIMPLE R         OVERALL F   SIGNIFICANCE
     ENTERED    REMOVED         ENTER OR REMOVE                                      CHANGE

  1  ETHNWOH                       .67030          .415        .06837     .00467    .00467    .06837         1.30188        .249
     OCCWOH                        .72590          .396        .07456     .00556    .00088   -.02975
     AGEWOH                       3.49311          .064        .16955     .02875    .02319   -.15289
     EDUCWOH                      3.64864          .058        .22329     .04986    .02111   -.12149
     WKUNWOH                      1.53172          .218        .22661     .05135    .00149   -.00654
     NJOBWOH                       .79365          .375        .24337     .05923    .00788    .09097
     EMPLYWOH                     1.72478          .192        .26536     .07041    .01118    .07985
     EINCWOH                       .95035          .332        .27836     .07748    .00707    .07005
  2  PFAMSIZE                      .19230          .662        .28093     .07892    .00144   -.06692         1.17106        .319
  3  FUNEMPAT                      .01242          .911        .28110     .07902    .00009   -.02456         1.04673        .409
  4  TIMEOUT                       .34470          .558        .28572     .08163    .00262   -.12171          .97780        .470
  5  COMPSTAT                      .87320          .352        .29710     .08827    .00663    .05637          .96814        .483
```